GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Summary Page

Name of Facility Precision Protective Coatings, Inc.

Pretreatment Permit No. GAP050297

This permit is a reissuance of a pretreatment permit for Precision Protective Coatings, Inc. The facility discharges a maximum of 0.008 MGD of metal finishing process wastewater. This facility discharges to the Garden City WPCP in the Savannah River Basin. The permit expires on November 30, 2021.

The permit was placed on public notice from September 15, 2021 to October 17, 2021.

Please Note The Following Changes to the Proposed Pretreatment Permit From The Existing Permit

Part I.A.1. – Effluent Limitations and Monitoring Requirements

- ☐ Modified the mass-based daily maximum effluent limitation for cadmium, total from 0.0073 lbs/day to 0.004 lbs/day in accordance with the method for calculating mass-based limitations for pretreatment standards prescribed in 40 CFR 403.
- ☐ Modified the concentration-based effluent limitations for chromium, total from 0.90 mg/L daily average and 0.90 mg/L daily maximum to 0.9 mg/L daily average and 0.9 mg/L daily maximum based on the number of significant figures prescribed in the Garden City sewer use ordinance.
- ☐ Modified the concentration-based effluent limitations for copper, total from 0.90 mg/L daily average and 0.90 mg/L daily maximum to 0.9 mg/L daily average and 0.9 mg/L daily maximum based on the number of significant figures prescribed in the Garden City sewer use ordinance.
- ☐ Modified the concentration-based effluent limitations for nickel, total from 0.90 mg/L daily average and 0.90 mg/L daily maximum to 0.9 mg/L daily average and 0.9 mg/L daily maximum based on the number of significant figures prescribed in the Garden City sewer use ordinance.
- ☐ Modified the mass-based daily average effluent limitation for silver, total from 0.0077 lbs/day to 0.008 lbs/day to provide a consistent number of significant figures for mass-based effluent limitations.
- ☐ Removed the daily average effluent limitations for TTOs based on 40 CFR 433 which does not prescribe daily average pretreatment standards.
- ☐ Modified the mass-based daily maximum effluent limitation for TTO from 0.142 lbs/day to 0.071 lbs/day in accordance with the method for calculating mass-based limitations for pretreatment standards prescribed in 40 CFR 403.

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Standard Conditions & Boilerplate Modifications

The permit boilerplate includes modified language or added language consistent with other Pretreatment permits.

Final Permit Determinations and Public Comments

☒ Final issued permit did not change from the draft permit placed on public notice.

☒ Public comments were received during public notice period.

☐ Public hearing was held.

☐ Final permit includes changes from the draft permit placed on public notice. See attached permit revisions and/or permit fact sheet revisions document(s)

Public Comments and EPD Responses on Draft Pretreatment Permit
Precision Protective Coatings, Inc. – Permit No. GAP050297

COMMENT RECEIVED	EPD RESPONSE
Precision Protective Coatings Wastewater NPDES application is an excellent example of the kind of industry that should not be allowed to discharge their wastewater into a sanitary sewer system. Sanitary sewage treatment is set up to treat primarily organic waste, not industrial waste, especially from an electroplating/anodizing industry.	Municipal wastewater treatment plants, or publicly owned treatment works (POTW) are designed to collect and treat wastewater from homes, businesses, and industries. Federal pretreatment regulations at 40 C.F.R. 403 and 40 C.F.R. 433 explicitly address the discharge of industrial waste to a POTW as a whole, and more specifically, address wastewater discharges from metal finishing operations such as those performed by Precision Protective Coatings, Inc. (PPC). EPD has evaluated the application and supporting documents and has drafted a pretreatment permit that is protective of the POTW and will not result in pass through or interference with the treatment processes at the POTW.
I am surprised that [Precision Protective Coatings] measured ammonia and TKN in their wastewater. That indicates to me that the wastewater also contains the plant's sewage even though the BOD_5 was undetectable.	The presence of small amounts of ammonia and total Kjeldahl nitrogen and absence of BOD reported by PPC on their application is not an indicator that process wastewater sampling results include PPC's sanitary sewage. The pretreatment application provided by PPC indicates that the building has a separate sanitary sewer line that conveys sanitary wastewater to the POTW's sewerage system. Ammonia compounds may be present in chemical solutions used in a variety of metal finishing operations. A more in-depth discussion of metal finishing operations is provided in EPA's *Development Document for Effluent Limitations Guidelines and Standards for the Metal Finishing Point Source Category,* (June 1983).
EPD should have required Precision Protective Coatings (PPC) to measure and report the concentrations of the metals in the wastewater that EPD has decided need to be in the permit. Why, exactly, were each of those metals selected? Aside from chromium and possibly lead, none of	The pretreatment permit application for PPC includes analytical results for all parameters which were included in the draft pretreatment permit. The metals which have been included in the draft pretreatment permit are required to be included based on the federal pretreatment standards

COMMENT RECEIVED	EPD RESPONSE
them are obvious contaminants. But aluminum is a potential contaminant, but limitations are not included in the permit for aluminum. Of the eight things that EPD required PPC to measure and report only flow appears in the permit. Obviously, the measurements that EPD requires are based on sewage and not on the likely composition of the wastewater. Of the parameters actually measured only flow, TSS and COD are relevant to PPC's discharge. And at 300 mg/L the COD will require more than 20 complete turnovers of oxygen concentration in the water to oxidize those chemicals. By its very nature electroplating and anodizing are the chemical reduction of metals essentially guaranteeing a fairly heavy COD in the wastewater.	for new sources (PSNS) established in 40 C.F.R. 433, regardless of whether they were detected in the discharge. Where the Garden City sewer use ordinance and EPD's local limits evaluation established more stringent effluent limitations than those required by the federal PSNS, the more stringent effluent limitations have been included in the permit. For parameters which do not have federal PSNS, effluent limitations are included where EPD has conducted a local limits evaluation and determined there is a reasonable potential for the discharge to cause or contribute to pass through or interference with the treatment processes in the POTW. The results of the local limits evaluation did not indicate the need for effluent limitations for aluminum, nor the eight "Part A" parameters referenced by the commenter.
The alkaline side of the pH range acceptable by the Garden City POTW seems a bit high for maximal aeration function at the plant, especially at pH 9.5. But even at pH 9.0 (in the permit) it is too high for the efficient use of bacteria in the aeration process. At pH 9.0 the hydrogen ion concentration is $1/100^{th}$ of the hydrogen ion concentration at pH 7.0. And at pH it is less than $1/500^{th}$ of the pH 7.0 concentration. These low hydrogen ion concentrations will significantly affect the metabolism of the aerobic bacteria used in the aeration process until the pH gets buffered back closer to 7.0.	The Garden City sewer use ordinance establishes an allowable range of 6.0 – 9.5 s.u. for pH. EPD has further reduced this range to 6.0 – 9.0 s.u. in the pretreatment permit as a conservative measure to protect the POTW. Historical operations give no indication that such pH values have caused interference of the treatment process in the POTW.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office
2 Martin Luther King, Jr. Drive
Suite 1456, East Tower
Atlanta, Georgia 30334
404-656-4713

Mr. Robert Rahn, Plant Manager
Precision Protective Coatings, Inc.
8 Telfair Place
Garden City, Georgia 31415

11/04/2021

RE: Permit Issuance
Precision Protective Coatings, Inc.
Pretreatment Permit GAP050297
Chatham County, Savannah River Basin

Mr. Rahn:

Pursuant to the Georgia Water Quality Control Act, as amended, the Federal Clean Water Act, as amended, and the Rules and Regulations promulgated thereunder, we have issued the attached permit for the above-referenced facility.

Your facility has been assigned to the following EPD office for reporting and compliance. Signed copies of all required reports shall be submitted to the following address:

Environmental Protection Division
Coastal District Office
400 Commerce Center Drive
Brunswick, Georgia 31523-8251

Please be advised that on and after the effective date indicated in the permit, the permittee must comply with all terms, conditions, and limitations of the permit. If you have questions concerning this correspondence, please contact Ian McDowell at 470.604.9483 or *ian.mcdowell@dnr.ga.gov*.

Sincerely,

Richard E. Dunn
Director

RED:im
Enclosure(s): Final Permit, Permit Fact Sheet with Appendices

cc: EPD Coastal District (Brunswick) Office – Thomas Giordano (*thomas.giordano@dnr.ga.gov*)
Precision Protective Coatings, Inc., Operations Supervisor – Ryan Underwood (*ryan.underwood@ppcsav.com*)
Garden City, City Manager – Ron Feldner (*rfeldner@gardencity-ga.gov*)

Permit No. GAP050297
Issuance Date: 11/04/2021

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Industrial Pretreatment Permit

In accordance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the State Act; the Federal Water Pollution Control Act, as amended (33 U.S. C. 1251 et seq.), hereinafter called the Federal Act; and the Rules and Regulations promulgated pursuant to each of these Acts,

Precision Protective Coatings, Inc.
8 Telfair Place
Garden City, Georgia 31415

is authorized to discharge from a facility located at

8 Telfair Place
Garden City, Georgia 31415
Chatham County

to the sewerage system tributary to the

Garden City Water Pollution Control Plant (WPCP) in the Savannah River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit.

This permit is issued in reliance upon the permit application signed on June 03, 2021, and any other applications upon which this permit is based, supporting data entered therein or attached thereto, and any subsequent submittal of supporting data.

This facility is subject to the terms, conditions and requirements of 40 Code of Federal Regulations (CFR) Part 403 and the Georgia Water Quality Control Act Chapter 391-3-6.

This facility is subject to the requirements of 40 CFR 433 Metal Finishing Point Source Category, Pretreatment Standards for New Sources (PSNS).

This permit shall become effective on December 01, 2021.

This permit and the authorization to discharge shall expire at midnight November 30, 2026.

STATE OF GEORGIA
CONSTITUTION
WISDOM
JUSTICE
MODERATION
1776

Richard E. Dunn, Director
Environmental Protection Division

PART I

A. Effluent Limitations and Monitoring Requirements

1. During the period specified on the first page of this permit, the permittee is authorized to discharge from outfall no(s.) 001 – metal finishing process wastewater to the sewerage system and publicly owned treatment works (POTW) at the Garden City Water Pollution Control Plant (WPCP).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics (Specify Units)	Discharge Limitations				Monitoring Requirements[1]		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Flow (MGD)	0.004	0.008			Daily	Recorder	Final Effluent[2]
Cadmium, Total	0.002	0.004	0.07	0.11	1/Month	Composite	Final Effluent[2]
Chromium, Total	0.030	0.060	0.9	0.9	1/Month	Composite	Final Effluent[2]
Copper, Total	0.030	0.060	0.9	0.9	1/Month	Composite	Final Effluent[2]
Lead, Total	0.002	0.003	0.05	0.05	1/Month	Composite	Final Effluent[2]
Nickel, Total	0.030	0.060	0.9	0.9	1/Month	Composite	Final Effluent[2]
Silver, Total	0.008	0.015	0.23	0.23	1/Month	Composite	Final Effluent[2]
Zinc, Total	0.002	0.005	0.07	0.07	1/Month	Composite	Final Effluent[2]
Cyanide, Total	0.003	0.006	0.09	0.09	1/Month	Grab	Final Effluent[2]
Total Toxic Organics[3,4] (TTO)		0.071		2.13	Semiannual	Grab	Final Effluent[2]

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored daily by grab sample.

The Discharge Limitations outlined above are subject to revision if dictated by Title 40, Code of Federal Regulations Part 403, (40 CFR 403), 40 CFR 433, Subpart A (PSNS), or EPD determinations. The Permittee will be notified in writing of any changes in the above listed discharge limitations

[1] All the parameters must be monitored, at a minimum, at the measurement frequency stated above if there is any discharge. If there is no discharge, state such in the discharge monitoring report for the monitoring period.

[2] The final effluent for purposes of sampling, monitoring and the application of pretreatment limitations is the final discharge point prior to entry into the sewerage system.

[3] The term "TTO" shall mean total toxic organics, which is the summation of all quantifiable values greater than 0.01 mg/L for the toxic organics outlined in 40 C.F.R. 433.11(e).

[4] In lieu of monitoring for TTO, the permittee may certify that TTOs are not present in the wastewater discharge. If certification will be used in lieu of monitoring, it must be preceded by EPD approval of a solvent management plan submitted by the permittee. Both the solvent management plan and the certification statement should be in accordance with the requirements set forth in 40 C.F.R. 433.12.

B. Monitoring

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Sampling Period

a. Unless otherwise specified in this permit, quarterly samples shall be taken during the periods January-March, April-June, July-September, and October-December.

b. Unless otherwise specified in this permit, semiannual samples shall be taken during the periods January-June and July-December.

c. Unless otherwise specified in this permit, annual samples shall be taken during the period of January-December.

3. Monitoring Procedures

Analytical methods, sample containers, sample preservation techniques, and sample holding times must be consistent with the techniques and methods listed in 40 CFR Part 136. The analytical method used shall be sufficiently sensitive. EPA-approved methods must be applicable to the concentration ranges of the NPDES permit samples.

4. Detection Limit

All parameters will be analyzed using the appropriate detection limits. If the results for a given sample are such that a parameter is not detected at or above the specified detection limit, a value of "NOT DETECTED" will be reported for that sample and the detection limit will also be reported.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date, and time of sampling or measurements, and the person(s) performing the sampling or the measurements;

b. The dates and times the analyses were performed, and the person(s) performing the analyses;

c. The analytical techniques or methods used;

d. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased monitoring frequency shall also be indicated. EPD may require, by written notification, more frequent monitoring or the monitoring of other pollutants not required in this permit.

7. Records Retention

The permittee shall retain records of all monitoring information, including all records of analyses performed, calibration and maintenance of instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a minimum of three (3) years from the date of the sample, measurement, report or application, or longer if requested by EPD.

8. Penalties

The Federal Clean Water Act and the Georgia Water Quality Control Act provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director of EPD.

C. Definitions

1. A "bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

2. A “calendar day” is defined as any consecutive 24-hour period.

3. A “composite” sample shall consist of samples collected at intervals not less frequently than every two hours for a period of 24 hours or for the actual time the pretreatment facility is discharging (if less than 24 hours), and composited according to flow.

4. The "daily average” mass means the total discharge by mass during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.

5. The "daily maximum" mass means the total discharge by mass during any calendar day.

6. The "daily average" concentration means the arithmetic average of all the daily determinations of concentrations made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample.

7. The "daily maximum" concentration means the daily determination of concentration for any calendar day.

8. The “daily maximum flow” is the largest total volume determined for any 24 hour period.

9. “EPD” as used herein means the Environmental Protection Division of the Department of Natural Resources.

10. A “POTW” as used herein means Publicly-Owned Treatment Works.

11. The “Rules” as used herein means the Georgia Rules and Regulations for Water Quality Control.

12. "Severe property damage" means substantial physical damage to property, damage to treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

13. The “State Act” as used herein means the Georgia Water Quality Control Act (Official Code of Georgia Annotated; Title 12, Chapter 5, Article 2).

D. Reporting Requirements

1. The permittee must electronically report the DMR, OMR and additional monitoring data using the web based electronic NetDMR reporting system, unless a waiver is granted by EPD.

a. The permittee must comply with the Federal National Pollutant Discharge Elimination System Electronic Reporting regulations in 40 CFR §127. The permittee must electronically report the DMR, OMR, and additional monitoring data using the web based electronic NetDMR reporting system online at: https://netdmr.epa.gov/netdmr/public/home.htm

b. Monitoring results obtained during the calendar month shall be summarized for each month and reported on the DMR. The results of each sampling event shall be reported on the OMR and submitted as an attachment to the DMR.

c. The permittee shall submit the DMR, OMR and additional monitoring data no later than 11:59 p.m. on the 15th day of the month following the sampling period.

d. All other reports required herein, unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

2. **No later than December 21, 2025,** the permittee must electronically report the following compliance monitoring data and reports using the online web based electronic system approved by EPD, unless a waiver is granted by EPD:

a. Sewer Overflow/Bypass Event Reports;
b. Noncompliance Notification;
c. Other noncompliance; and
d. Bypass

3. Other Reports

All other reports required in this permit not listed above in Part I.D.2 or unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

4. Other Noncompliance

All instances of noncompliance not reported under Part I.B. and Part II. A. shall be reported to EPD at the time the monitoring report is submitted.

5. Signatory Requirements

All reports, certifications, data or information submitted in compliance with this permit or requested by EPD must be signed and certified as follows:

a. Any State or NPDES Permit Application form submitted to the EPD shall be signed as follows in accordance with the Federal Regulations, 40 C.F.R. 122.22:

1. For a corporation, by a responsible corporate officer. A responsible corporate officer means:

i a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or

ii. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

3. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.

b. All other reports or requests for information required by the permit issuing authority shall be signed by a person designated in (a) above or a duly authorized representative of such person, if:

1. The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;

2. The authorization is made in writing by the person designated under (a) above; and

3. The written authorization is submitted to the Director.

c. Any changes in written authorization submitted to the permitting authority under (b) above which occur after the issuance of a permit shall be reported to the permitting authority by submitting a copy of a new written authorization which meets the requirements of (b) and (b.1) and (b.2) above.

d. Any person signing any document under (a) or (b) above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PART II

A. Management Requirements

1. Notification of Changes

a. The permittee shall provide EPD at least 90 days advance notice of any planned physical alterations or additions to the permitted facility that meet the following criteria:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1); or

3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. The permittee shall give at least 90 days advance notice to EPD of any planned changes to the permitted facility or activity which may result in noncompliance with permit requirements.

c. Following the notice in paragraph a. or b. of this condition the permit may be modified. The permittee shall not make any changes, or conduct any activities, requiring notification in paragraph a. or b. of this condition without approval from EPD.

d. The permittee shall provide at least 30 days advance notice to EPD of:

1. any planned expansion or increase in production capacity; or

2. any planned installation of new equipment or modification of existing processes that could increase the quantity of pollutants discharged or result in the discharge of pollutants that were not being discharged prior to the planned change

if such change was not identified in the permit application(s) upon which this permit is based and for which notice was not submitted under paragraphs a. or b. of this condition.

e. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 100 µg/L, (ii) five times the maximum concentration reported for that pollutant in the permit application, or (iii) 200 µg/L for acrolein and acrylonitrile, 500 µg/L for 2,4 dinitrophenol and for 2-methyl-4-6-dinitrophenol, or 1 mg/L antimony.

f. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in any discharge on a nonroutine or infrequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 500 µg/L, (ii) ten times the maximum concentration reported for that pollutant in the permit application, or (iii) 1 mg/L antimony.

g. Upon the effective date of this permit, the permittee shall submit to EPD an annual certification in June of each year certifying whether or not there has been any change in processes or wastewater characteristics as described in the submitted NPDES permit application that required notification in paragraph a., b., or d. of this condition. The permittee shall also certify annually in June whether the facility has received offsite wastes or wastewater and detail any such occurrences.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with, or will be unable to comply with any effluent limitation specified in this permit, the permittee shall provide EPD and the owner of the receiving POTW with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

3. Facility Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

a. Any diversion from or bypass of pretreatment facilities covered by this permit is prohibited, except where unavoidable to prevent personal injury, loss of life, or severe property damage. The permittee shall operate the pretreatment works to minimize discharge of the pollutants listed in this permit from overflows or bypasses. The permittee shall monitor all overflows, bypasses, or spills. EPD and the owner of the receiving POTW shall be notified, in advance if possible, of any overflows, bypasses or spills. A record of each overflow bypass and spill shall be kept with information on the location, cause, duration, a peak flow rate. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing overflows, bypasses or spills.

b. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to EPD and the owner of the receiving POTW at least 10 days (if possible) before the date of the bypass. The permittee shall submit notice of any unanticipated bypass with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

1. A description of the discharge and cause of noncompliance; and

2. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

6. Sludge Disposal Requirements

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State or creating an adverse impact on the environment. Handling and disposal of such substances shall be in accordance with all applicable State and Federal regulations. Records must be maintained of the quantity (volume and concentration or mass) of such substances; the method of disposal; the location or site; and the date and time of disposal.

Sludge shall be disposed of in accordance with the regulations and guidelines established by EPD, the Federal Clean Water Act, and the Resource Conservation and Recovery Act (RCRA). Prior to disposal of sludge by any method other than co-disposal in a permitted sanitary landfill, the permittee shall submit a sludge management plan to EPD for written approval. For land application of nonhazardous sludge, the permittee shall comply with the applicable criteria outlined in the most current version of EPD's "Guidelines for Land Application of Sewage Sludge (Biosolids) at Agronomic Rates" and with the State Rules, Chapter 391-3-6-.17. EPD may require more stringent control of this activity. Prior to land applying nonhazardous sludge, the permittee shall submit a sludge management plan to EPD for review and approval. Upon approval, the plan for land application will become a part of the NPDES permit upon modification of the permit.

7. Sludge Monitoring Requirements

The permittee shall develop and implement procedures to ensure adequate year-round sludge disposal. The permittee shall monitor the volume and concentration of solids removed from the plant. Records shall be maintained which document the quantity of solids removed from the plant. The ultimate disposal of solids shall be reported (in the unit of lbs) to EPD as specified in Part I.D of this permit.

8. Power Failures

Upon the reduction, loss, or failure of the primary source of power to said water pollution control facilities, the permittee shall use an alternative source of power if available to reduce or otherwise control production and/or all discharges in order to maintain compliance with the effluent limitations and prohibitions of this permit.

If such alternative power source is not in existence, and no date for its implementation appears in Part I, the permittee shall halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

9. Operator Certification Requirements

The permittee shall, when required, have a certified operator in charge of the facility in accordance with Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant operators And Laboratory Analysts Rule 43-51-6.(b).

10. Laboratory Analyst Certification Requirements

The permittee shall ensure that, when required, the person in responsible charge of the laboratory performing the analyses for determining permit compliance is certified in accordance with the Georgia Certification of Water and Wastewater Treatment Plant operators and Laboratory Analysts Act, as amended, and the Rules promulgated thereunder.

B. Responsibilities

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

a. To enter upon the permittee's premises where a discharge source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and to sample any substance or parameters in any location.

2. Transfer of Ownership or Control

A permit may be transferred to another person by a permittee if:

a. The permittee notifies the Director of EPD and the owner of the receiving POTW in writing of the proposed transfer at least thirty (30) days in advance of the proposed transfer;

b. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) is submitted to the Director at least thirty (30) days in advance of the proposed transfer; and

c. The Director, within thirty (30) days, does not notify the current permittee and the new permittee of EPD’s intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

3. Availability of Reports

Except for data deemed to be confidential under O.C.G.A. § 12-5-26 or by the Regional Administrator of the EPA under the Code of Federal Regulations, Title 40, Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at an office of EPD. Effluent data, permit applications, permittee's names and addresses, and permits shall not be considered confidential.

4. Permit Modification

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or

d. To comply with any applicable effluent limitation issued pursuant to the order of the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120(D.D.C. 1976), if the effluent limitation so issued:

1. is different in conditions or more stringent than any effluent limitation in the permit; or

2. controls any pollutant not limited in the permit.

5. Toxic Pollutants

Notwithstanding Part II B.8 below, if a toxic discharge standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge, and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic discharge standard or prohibition and the permittee so notified.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Clean Water Act.

8. Local Ordinances

Nothing in this permit shall be construed to relieve the permittee from the responsibility of compliance with any local ordinance whose requirements are more stringent than those contained in this permit.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Expiration of Permit

The permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by EPD at least 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by an action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Management Practices

The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage, in-plant transfer, process and material handling, loading and unloading operations, plant site runoff, and sludge and waste disposal.

14. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

15. Duty to Provide Information

a. The permittee shall furnish to the EPD Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request copies of records required to be kept by this permit.

b. When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts and information.

16. Duty to Comply

a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et. seq.) and is grounds for enforcement action; for permit termination; revocation and reissuance, or modification; or for denial of a permit renewal application. Any instances of noncompliance must be reported to EPD as specified in Part I.D and Part II.A of this permit.

b. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et. seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine or by imprisonment, or by both. The Georgia Water Quality Control Act (Act) also provides procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director**.**

17. Upset Provisions

Provisions of 40 CFR 122.41(n)(1)-(4), regarding "Upset" shall be applicable to any civil, criminal, or administrative proceeding brought to enforce this permit.

PART III

A. Previous Permits

1. All previous State waste water permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Clean Water Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

B. Schedule of Compliance

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule: N/A

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

C. Special Conditions

1. The permittee shall not discharge substances in amounts, concentrations or combinations thereof which:

   a. interfere with the operation of the Garden City Water Pollution Control Plant (WPCP)**;**

   b. cause pass-through of pollutants in violation of the effluent limitations specified in National Pollutant Discharge Elimination System Permit No. GA0031038;

   c. cause municipal sludge contamination; or

   d. cause pass-through of pollutants that result in toxicity in aquatic life in the receiving stream.

2. Slug Discharges

   a. Slug discharge shall be defined as any discharge of a non-routine, episodic nature including, but not limited to an accidental spill or a non-customary batch discharge.

   b. The permittee shall notify the EPD and the owner of the receiving POTW immediately of any discharge or discharges including slug discharges that could result in operational problems at the POTW.

   c. Upon notification from the EPD, the permittee shall develop and implement a plan to control slug discharges in accordance with the requirements of 40 CFR Part 403.8.

3. If sampling performed by the permittee indicates a violation, the permittee shall immediately notify the EPD Compliance Office within twenty-four (24) hours of becoming aware of the violation. For continuous dischargers, the permittee shall also immediately, within 24 hours, repeat the sampling and analysis of all of the constituents that may have contributed to the violation. For intermittent dischargers, repeat sampling and analysis should be conducted on the subsequent discharge. The sampling results shall be submitted to the EPD Compliance Office within 30 days after becoming aware of the violation.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

The Georgia Environmental Protection Division proposes to issue a Pretreatment permit to the applicant identified below. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to waters of the State.

Technical Contact: Ian McDowell (*ian.mcdowell@dnr.ga.gov*)
470-604-9483

Draft permit:

- ☐ first issuance
- ☐ reissuance with no or minor modifications from previous permit
- ☒ reissuance with substantial modifications from previous permit
- ☐ modification of existing permit

1.0 FACILITY INFORMATION

1.1 Pretreatment Permit No.: GAP050297

1.2 Name and Address of Owner/Applicant

Precision Protective Coatings, Inc.
8 Telfair Place
Garden City, Georgia 31415
Chatham County

1.3 Name and Address of Facility

Precision Protective Coatings, Inc.
8 Telfair Place
Garden City, Georgia 31415
Chatham County

1.4 Facility Information

a. Average Flow[1]: 4,000 GPD

b. Categorical (Y/N): Y

c. Production Based (Y/N): N

d. Max Flow[1]: 8,000 GPD

e. Significant Industrial User (Y/N): Y

f. Production Capacity: N/A

[1] The facility is permitted to discharge 4,000 gpd daily average and 8,000 gpd daily maximum. Actual flow values are not representative of facility operations due to the Covid pandemic.

1.5 SIC Code & Description:

3471 – Electroplating, Plating, Polishing, Anodizing, and Coloring

1.6 Description of Industrial Processes

Operations include cleaning of aluminum, anodizing of aluminum, chromate conversion coating of aluminum, and cleaning and passivation of steel.

1.7 Description of the Industrial Wastewater Treatment Facility

Wastewaters are produced from dilution overflows of rinse waters to maintain pH and conductivity limits per process specifications. These rinse waters are from alkaline aluminum cleaner, alkaline aluminum etchant, ferric and nitric based deoxidizer, chromic acid, chromate conversion coating solution, nitric and nitric/sodium dichromate passivation, boric/sulfuric acid. The rinse waters also contain traces of aluminum and alloying elements found in aluminum. A significant amount of discharge is reverse osmosis reject water.

1.8 Type of Wastewater Discharge

☒ process wastewater ☐ stormwater

☐ domestic wastewater ☐ combined

☐ other

1.9 Name and Address of Receiving POTW

Garden City Water Pollution Control Plant (WPCP)
1 Bud Brown Drive
Garden City, Georgia 31418
Chatham County

1.10 Location and Description of the discharge (as reported by applicant)

Outfall #	Receiving POTW	Receiving POTW Permit No.	Max Receiving POTW Permitted Flow	River Basin
001	Garden City WPCP	GA0031038	2.5 MGD (Weekly Average)	Savannah

1.11 Receiving POTW Design Capacity: 2.0 MGD

1.12 Description of the POTW Wastewater Treatment

Wastewater treatment:

The treatment process consists of screening, biological treatment (activated sludge with aeration basins for nutrients removal), secondary clarification, chlorination, and reaeration.

Solids processing:

Sludge is dewatered using a belt filter press then sent to a landfill for ultimate disposal.

1.13 Characterization of Effluent Discharge as Reported by Applicant

(Pretreatment Permit Application, Section XI, Part A only. Please refer to the application for additional analysis)

Outfall No. 001 – Metal finishing process wastewater

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Daily Value
Flow (MGD)	0.0066	0.0015
BOD_5 (mg/L)	Non-Detect	N/A
COD (mg/L)	300	N/A
Oil & Grease (mg/L)	Non-Detect	N/A
TSS (mg/L)	9.4	N/A
Ammonia (mg/L)	0.68	N/A
Total Phosphorus (mg/L)	Non-Detect	N/A
Total Kjeldahl Nitrogen (mg/L)	1.1	N/A

2.0 APPLICABLE REGULATIONS

2.1 Local Regulations

Garden City Code of Ordinances, Chapter 82, Article IV (Sewer Use Ordinance)
See Appendix C for Sewer Use Ordinance

2.2 State Regulations

Chapter 391-3-6 of the Georgia Rules and Regulations for Water Quality Control

2.3 Federal Regulations

Source	Activity	Applicable Regulation
Industrial	Pretreatment	40 CFR 403
	Process Water Discharges	40 CFR 122 40 CFR 125 40 CFR 136 40 CFR 433

2.4 Industrial Effluent Limit Guideline(s)

Code of Federal Regulations, 40 CFR Part 403.
Code of Federal Regulations, 40 CFR Part 433, Subpart A (PSNS)

See Appendix A For Applicable Federal Regulations

3.0 EFFLUENT LIMITS AND PERMIT CONDITIONS

3.1 Permit Development

"The national pretreatment program objectives are achieved by applying and enforcing three types of pretreatment standards:"

- General and specific prohibitions
- Categorical pretreatment standards
- Local limits

"All three types of standards can be enforced by EPA, the state, and local government, even though they are developed at different levels of government (i.e., federal, state, and local). Pretreatment standards and requirements can be expressed as numeric limits, narrative prohibitions, and best management practices."

"The control authority is responsible for identifying standard(s) applicable to each IU and applying the most stringent requirements where multiple provisions exist." EPA Guidance - *Applicability of Pretreatment Standards and Requirements* (https://www.epa.gov/npdes/pretreatment-standards-and-requirements)

"Local limits are developed for pollutants (e.g. metals, cyanide, BOD5 , TSS, oil and grease, organics) that may cause interference, pass through, sludge contamination, and/or worker health and safety problems if discharged in excess of the receiving POTW treatment plant's capabilities and/or receiving water quality standards." EPA Guidance Document – *Introduction to the National Pretreatment Program, February 1999*

Local limit considerations can be broken down into several categories consisting of: sewer use ordinances, state level local limits, POTW NPDES limits, water quality standards, and POTW inhibition.

3.2 Conventional Pollutants

Pollutants of Concern	Basis
pH	Local Limit The Garden City Sewer Use Ordinance establishes pH limitations of no less than 6.0 s.u. and no greater than 9.5 s.u. Effluent limitation of no less than 6.0 s.u. and no greater than 9.0 s.u. have been retained from the previous permit based on demonstrated performance.
	Categorical Limit There is no applicable federally based categorical limit.
Total Suspended Solids	Local Limit The Garden City Sewer Use Ordinance establishes a narrative criterion that prevent the discharge of TSS in such quantities as to constitute a significant load on the sewage treatment works. Based on the TSS concentration and flow volumes provided in the application, the discharge should not constitute a significant loading of TSS thus no monitoring or effluent limitations have been included.
	Categorical Limit There is no applicable federally based categorical limit.
Chemical Oxygen Demand	Local Limit The Garden City Sewer Use Ordinance establishes a narrative criterion that prevent the discharge of chemical oxygen demand in such quantities as to constitute a significant load on the sewage treatment works. Based on the COD concentration and flow volumes provided in the application, the discharge should not constitute a significant loading of COD thus no monitoring or effluent limitations have been included.
	Categorical Limit There is no applicable federally based categorical limit.

3.3 Toxics & Manmade Organic Compounds (126 priority pollutants and metals)

Pollutants of Concern	Basis
Cadmium, Total	Local Limit The Garden City sewer use ordinance establishes a daily maximum of 0.9 mg/L for cadmium. The more stringent categorical limits have been included in the permit.
	Categorical Limit Effluent limitations of 0.07 mg/L daily average and 0.11 mg/L daily maximum are established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). These limitations have been included in the permit. Equivalent mass-based effluent limitations of 0.002 lbs/day daily average and 0.004 lbs/day daily maximum have been calculated using the daily average flow rate in accordance with 40 CFR 403. These limitations have been included in the permit.
Chromium, Total	Local Limit The Garden City sewer use ordinance establishes a daily maximum of 0.9 mg/L for chromium. Effluent limitations of 0.9 mg/L daily average and 0.9 mg/L daily maximum have been included in the permit. Mass-based effluent limitations of 0.030 lbs/day daily average and 0.060 lbs/day daily maximum have been calculated based on the corresponding permitted flows. These limitations have been included in the permit.
	Categorical Limit Effluent limitations of 1.71 mg/L daily average and 2.77 mg/L daily maximum are established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). The more stringent local limits have been included in the permit.
Copper, Total	Local Limit The Garden City sewer use ordinance establishes a daily maximum of 0.9 mg/L for copper. Effluent limitations of 0.9 mg/L daily average and 0.9 mg/L daily maximum have been included in the permit. Mass-based effluent limitations of 0.030 lbs/day daily average and 0.060 lbs/day daily maximum have been calculated based on the corresponding permitted flows. These limitations have been included in the permit.

	Categorical Limit Effluent limitations of 2.07 mg/L daily average and 3.38 mg/L daily maximum are established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). The more stringent local limits have been included in the permit.
Lead, Total	Local Limit The Garden City sewer use ordinance establishes a daily maximum of 0.09 mg/L for lead. Effluent limitations of 0.05 mg/L daily average and 0.05 mg/L daily maximum have been retained from the previous permit based on demonstrated performance. Mass-based effluent limitations of 0.002 lbs/day daily average and 0.003 lbs/day daily maximum have been calculated based on the corresponding permitted flows. These limitations have been included in the permit.
	Categorical Limit Effluent limitations of 0.43 mg/L daily average and 0.69 mg/L daily maximum are established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). The more stringent local limits have been included in the permit.
Nickel, Total	Local Limit The Garden City sewer use ordinance establishes a daily maximum of 0.9 mg/L for nickel. Effluent limitations of 0.9 mg/L daily average and 0.9 mg/L daily maximum have been included in the permit. Mass-based effluent limitations of 0.030 lbs/day daily average and 0.060 lbs/day daily maximum have been calculated based on the corresponding permitted flows. These limitations have been included in the permit.
	Categorical Limit Effluent limitations of 2.38 mg/L daily average and 3.98 mg/L daily maximum are established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). The more stringent local limits have been included in the permit.
Silver, Total	Local Limit The Garden City sewer use ordinance establishes a daily maximum of 0.23 mg/L for silver. Effluent limitations of 0.23 mg/L daily average and 0.23 mg/L daily maximum have been included in the permit. Mass-based effluent limitations of 0.008 lbs/day daily average and 0.015 lbs/day daily maximum have been calculated based on the corresponding permitted flows. These limitations have been included in the permit.

	Categorical Limit Effluent limitations of 0.24 mg/L daily average and 0.43 mg/L daily maximum are established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). The more stringent local limits have been included in the permit.
Zinc, Total	Local Limit The Garden City sewer use ordinance establishes a daily maximum of 0.07 mg/L for zinc. Effluent limitations of 0.07 mg/L daily average and 0.07 mg/L daily maximum have been included in the permit. Mass-based effluent limitations of 0.002 lbs/day daily average and 0.005 lbs/day daily maximum have been calculated based on the corresponding permitted flows. These limitations have been included in the permit.
	Categorical Limit Effluent limitations of 1.48 mg/L daily average and 2.61 mg/L daily maximum are established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). The more stringent local limits have been included in the permit.
Cyanide, Total	Local Limit The Garden City sewer use ordinance establishes a daily maximum of 0.09 mg/L for cyanide. Effluent limitations of 0.09 mg/L daily average and 0.09 mg/L daily maximum have been included in the permit. Mass-based effluent limitations of 0.003 lbs/day daily average and 0.006 lbs/day daily maximum have been calculated based on the corresponding permitted flows. These limitations have been included in the permit.
	Categorical Limit Effluent limitations of 0.65 mg/L daily average and 1.20 mg/L daily maximum are established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). The more stringent local limits have been included in the permit.
Total Toxic Organics (TTO)	Local Limit TTOs are not limited in the Garden City sewer use ordinance.
	Categorical Limit An effluent limitation of 2.13 mg/L daily maximum is established in 40 CFR 433 Subpart A, Pretreatment Standards for New Sources (PSNS). An equivalent mass-based effluent limitation of 0.071 lbs/day daily maximum has been calculated using the daily average flow rate in accordance with 40 CFR 403. This limitation has been included in the permit.

3.4 Comparison and Summary of Limits

The highlighted limits shown below indicate the most stringent allowable limits for the permit based on all pretreatment standards.

Pollutant[1]	Categorical	SUO	Sludge Regulations[2]	POTW NPDES - Based Limit	WQS[3] (acute & chronic)	POTW[4] Inhibition	Previous Permit
Cadmium	0.07/0.11 mg/L	0.9 mg/L	N/A	N/A	12,824 mg/L	263 mg/L	0.07/0.11 mg/L
Chromium	1.71/2.77 mg/L	0.9 mg/L	N/A	N/A	N/A	68.6 mg/L	0.90/0.90 mg/L
Copper	2.07/3.38 mg/L	0.9 mg/L	N/A	N/A	8,562 mg/L	34.4 mg/L	0.90/0.90 mg/L
Lead	0.43/0.69 mg/L	0.09 mg/L	N/A	N/A	8,480 mg/L	247 mg/L	0.05/0.05 mg/L
Nickel	2.38/3.98 mg/L	0.9 mg/L	N/A	N/A	4,418 mg/L	53.7 mg/L	0.90/0.90 mg/L
Silver	0.24/0.43 mg/L	0.23 mg/L	N/A	N/A	N/A	N/A	0.23/0.23 mg/L
Zinc	1.48/2.61 mg/L	0.07 mg/L	N/A	N/A	180,886 mg/L	21.9 mg/L	0.07/0.07 mg/L
Cyanide	0.65/1.20 mg/L	0.09 mg/L	N/A	N/A	416 mg/L	10.4 mg/L	0.09/0.09 mg/L
TTO	2.13 mg/L	None	N/A	N/A	N/A	N/A	2.13/2.13 mg/L
pH	None	6.0 – 9.5 s.u.	N/A	N/A	N/A	N/A	6.0 – 9.0 s.u.

[1] Equivalent mass-based effluent limitations have been included in the permit for metals and TTO.
[2] Garden City WPCP hauls its sludge to a landfill, hence sludge criteria don't apply.
[3] There are no numerical water quality standards for the pollutants marked as N/A.
[4] The POTW doesn't have activated sludge or nitrification inhibition if marked as N/A.

3.5 Example Limit Calculations

An example calculation for each standard that required consideration has been included below. Complete results can be found in Appendix B – Effluent Limit Calculations.

3.5.a. NPDES Permit Limit Calculations

$$TSS\ AHL\left(\frac{lbs}{day}\right) = \frac{8.34 \times NPDES\ Limit\left(\frac{mg}{L}\right) \times POTW\ Flow(MGD)}{1 - \frac{POTW\ Removal\ Efficiency(\%)}{100}}$$

$$TSS\ AHL(\frac{lbs}{day}) = \frac{8.34 \times 30\left(\frac{mg}{L}\right) \times 1(MGD)}{1 - \frac{97\%}{100}}$$

$$TSS\ AHL\left(\frac{lbs}{day}\right) = 8{,}340$$

$$TSS\ Load\left(\frac{lbs}{day}\right) = AHL\left(\frac{lbs}{day}\right) \times \left(1 - \frac{Safety\ Factor(\%)}{100}\right)$$

$$TSS\ Load\left(\frac{lbs}{day}\right) = 8{,}340\left(\frac{lbs}{day}\right) \times \left(1 - \frac{20\%}{100}\right)$$

$$TSS\ Load\left(\frac{lbs}{day}\right) = 6{,}672$$

$$TSS\ Local\ Limit\left(\frac{mg}{L}\right) = \frac{Allowable\ Loading\ \left(\frac{lbs}{day}\right)}{8.34 \times POTW\ Flow(MGD)}$$

$$TSS\ Local\ Limit\left(\frac{mg}{L}\right) = \frac{6{,}672\ \left(\frac{lbs}{day}\right)}{8.34 \times 1(MGD)}$$

$TSS\ Local\ Limit\left(\frac{mg}{L}\right) = 800$ (Not Most Stringent Value)

3.5.b. Acute Water Quality Standard Calculations

$$Copper\ AHL(\frac{lbs}{day}) = \frac{8.34 \times Acute\ WQS\left(\frac{mg}{L}\right) \times \left(POTW\ Flow(MGD) + 1Q10(MGD)\right)}{1 - \frac{POTW\ Removal\ Efficiency(\%)}{100}}$$

$$Copper\ AHL(\frac{lbs}{day}) = \frac{8.34 \times 0.0138\left(\frac{mg}{L}\right) \times 601(MGD)}{1 - \frac{86\%}{100}}$$

$$Copper\ AHL\left(\frac{lbs}{day}\right) = 494$$

$$Copper\ Load\left(\frac{lbs}{day}\right) = AHL\left(\frac{lbs}{day}\right) \times \left(1 - \frac{Safety\ Factor(\%)}{100}\right) - Dom.|Com.Load\left(\frac{lbs}{day}\right)$$

$$Copper\ Load\left(\frac{lbs}{day}\right) = 494\left(\frac{lbs}{day}\right) \times \left(1 - \frac{10\%}{100}\right) - 1.16\left(\frac{lbs}{day}\right)$$

$$Copper\ Load\left(\frac{lbs}{day}\right) = 444$$

$$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = \frac{Allowable\ Loading\ \left(\frac{lbs}{day}\right)}{8.34 \times IU\ Pollutant\ Flow(MGD)}$$

$$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = \frac{444\ \left(\frac{lbs}{day}\right)}{8.34 \times 0.004(MGD)}$$

$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = 13{,}294$ (Not Most Stringent Value)

3.5.c. Chronic Water Quality Standard Calculations

$$Copper\ AHL(\frac{lbs}{day}) = \frac{8.34 \times Chronic\ WQS\left(\frac{mg}{L}\right) \times \left(POTW\ Flow(MGD) + 7Q10(MGD)\right)}{1 - \frac{POTW\ Removal\ Efficiency(\%)}{100}}$$

$$Copper\ AHL(\frac{lbs}{day}) = \frac{8.34 \times 0.0089\left(\frac{mg}{L}\right) \times 601(MGD)}{1 - \frac{86\%}{100}}$$

$$Copper\ AHL\left(\frac{lbs}{day}\right) = 319$$

$$Copper\ Load\left(\frac{lbs}{day}\right) = AHL\left(\frac{lbs}{day}\right) \times \left(1 - \frac{Safety\ Factor(\%)}{100}\right) - Dom.|Com.Load\left(\frac{lbs}{day}\right)$$

$$Copper\ Load\left(\frac{lbs}{day}\right) = 319\left(\frac{lbs}{day}\right) \times \left(1 - \frac{10\%}{100}\right) - 1.16\left(\frac{lbs}{day}\right)$$

$$Copper\ Load\left(\frac{lbs}{day}\right) = 286$$

$$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = \frac{Allowable\ Loading\ \left(\frac{lbs}{day}\right)}{8.34 \times IU\ Pollutant\ Flow(MGD)}$$

$$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = \frac{286\ \left(\frac{lbs}{day}\right)}{8.34 \times 0.004(MGD)}$$

$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = 8{,}562$ (Not Most Stringent Value)

3.5.d. POTW Inhibition Calculations

$$Copper\ AHL(\frac{lbs}{day}) = \frac{8.34 \times Inhibition\ Level\left(\frac{mg}{L}\right) \times POTW\ Flow(MGD)}{1 - \frac{POTW\ Removal\ Efficiency(\%)}{100}}$$

$$Copper\ AHL(\frac{lbs}{day}) = \frac{8.34 \times 0.27\left(\frac{mg}{L}\right) \times 1.0(MGD)}{1 - \frac{22\%}{100}}$$

$$Copper\ AHL\left(\frac{lbs}{day}\right) = 2.89$$

$$Copper\left(\frac{lbs}{day}\right) = AHL\left(\frac{lbs}{day}\right) \times \left(1 - \frac{Safety\ Factor(\%)}{100}\right) - Dom.|Com.Load\left(\frac{lbs}{day}\right)$$

$$Copper\ Load\left(\frac{lbs}{day}\right) = 2.89\left(\frac{lbs}{day}\right) \times \left(1 - \frac{20\%}{100}\right) - 1.16\left(\frac{lbs}{day}\right)$$

$$Copper\ Load\left(\frac{lbs}{day}\right) = 1.15$$

$$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = \frac{Allowable\ Loading\ \left(\frac{lbs}{day}\right)}{8.34 \times IU\ Pollutant\ Flow(MGD)}$$

$$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = \frac{1.15\ \left(\frac{lbs}{day}\right)}{8.34 \times 0.004(MGD)}$$

$Copper\ Local\ Limit\left(\frac{mg}{L}\right) = 34.4$ (Not Most Stringent Value)

4.0 OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS

4.1 *Anti-Backsliding*

The limits in this permit are in compliance with the 40 C.F.R. 122.44(l), which requires a reissued permit to be as stringent as the previous permit.

5.0 REPORTING

The facility has been assigned to the following EPD office for reporting, compliance and enforcement.

Georgia Environmental Protection Division
Coastal District Office
400 Commerce Center Drive
Brunswick, Georgia 31523-8251

5.1 E-Reporting

The permittee is required to electronically submit documents in accordance with 40 CFR Part 127.

6.0 REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

Not applicable

7.0 PERMIT EXPIRATION

The permit will expire five years from the effective date.

8.0 PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

8.1 Comment Period

The Georgia Environmental Protection Division (EPD) proposes to issue a permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Georgia Environmental Protection Division
Wastewater Regulatory Program
2 Martin Luther King Jr. Drive
Suite 1152 East
Atlanta, Georgia 30334

The permit application, draft permit, and other information are available for review at 2 Martin Luther King Jr. Drive, Suite 1152 East, Atlanta, Georgia 30334, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For additional information, you can contact 404-463-1511.

8.2 Public Comments

Persons wishing to comment upon or object to the proposed determinations are invited to submit same in writing to the EPD address above, or via e-mail at *EPDcomments@dnr.ga.gov* within 30 days of the initiation of the public comment period. All comments received prior to that date will be considered in the formulation of final determinations regarding the application. The permit number should be placed on the top of the first page of comments to ensure that your comments will be forwarded to the appropriate staff.

8.3 Public Hearing

Any applicant, affected state or interstate agency, the Regional Administrator of the U.S. Environmental Protection Agency (EPA) or any other interested agency, person or group of persons may request a public hearing with respect to an NPDES permit application if such request is filed within thirty (30) days following the date of the public notice for such application. Such request must indicate the interest of the party filing the request, the reasons why a hearing is requested, and those specific portions of the application or other NPDES form or information to be considered at the public hearing.

The Director shall hold a hearing if he determines that there is sufficient public interest in holding such a hearing. If a public hearing is held, notice of same shall be provided at least thirty (30) days in advance of the hearing date.

In the event that a public hearing is held, both oral and written comments will be accepted; however, for the accuracy of the record, written comments are encouraged. The Director or a designee reserves the right to fix reasonable limits on the time allowed for oral statements and such other procedural requirements, as deemed appropriate.

Following a public hearing, the Director, unless it is decided to deny the permit, may make such modifications in the terms and conditions of the proposed permit as may be appropriate and shall issue the permit.

If no public hearing is held, and, after review of the written comments received, the Director determines that a permit should be issued and that the determinations as set forth in the proposed permit are substantially unchanged, the permit will be issued and will become final in the absence of a request for a contested hearing. Notice of issuance or denial will be made available to all interested persons and those persons that submitted written comments to the Director on the proposed permit.

If no public hearing is held, but the Director determines, after a review of the written comments received, that a permit should be issued but that substantial changes in the proposed permit are warranted, public notice of the revised determinations will be given and written comments accepted in the same manner as the initial notice of application was given and written comments accepted pursuant to EPD Rules, Water Quality Control, subparagraph 391-3-6-.08(7)(b). The Director shall provide an opportunity for public hearing on the

revised determinations. Such opportunity for public hearing and the issuance or denial of a permit thereafter shall be in accordance with the procedures as are set forth above.

8.4 Final Determination

At the time that any final permit decision is made, the Director shall issue a response to comments. The issued permit and responses to comments can be found at the following address:

http://epd.georgia.gov/watershed-protection-branch-permit-and-public-comments-clearinghouse-0

8.5 Contested Hearings

Any person who is aggrieved or adversely affected by the issuance or denial of a permit by the Director of EPD may petition the Director for a hearing if such petition is filed in the office of the Director within thirty (30) days from the date of notice of such permit issuance or denial. Such hearing shall be held in accordance with the EPD Rules, Water Quality Control, subparagraph 391-3-6-.01.

Petitions for a contested hearing must include the following:

1. The name and address of the petitioner;
2. The grounds under which petitioner alleges to be aggrieved or adversely affected by the issuance or denial of a permit;
3. The reason or reasons why petitioner takes issue with the action of the Director;
4. All other matters asserted by petitioner which are relevant to the action in question.

APPENDIX A – Federal Regulations

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kg/kkg of raw material)	
BOD*5*	0.18	0.09
TSS	0.22	0.11
Oil and grease	0.10	0.05
Fecal coliforms	(1)	(1)
pH	(2)	(2)
	English units (lb/1,000 lb. of raw material)	
BOD*5*	0.18	0.09
TSS	0.22	0.11
Oil and grease	0.10	0.05
Fecal coliforms	(1)	(1)
pH	(2)	(2)

[1] Maximum at any time: 400 mpn/100 ml.
[2] Within the range 6.0 to 9.0.

(b) The limitations given in paragraph (a) of this section for BOD*5* and TSS are derived for a renderer which does no cattle hide curing as part of the plant activities. If a renderer does conduct hide curing, the following empirical formulas should be used to derive an additive adjustment to the effluent limitations for BOD*5* and TSS.

BOD*5* Adjustment (kg/kkg RM)=3.6×(number of hides)/kg of raw material
(lb/1,000 lb RM)=7.9×(number of hides)/lbs of raw material
TSS Adjustment (kg/kkg RM)=6.2×(number of hides)/kg of raw material
(lb/1,000 lb RM)=13.6×(number of hides)/lbs of raw material

[51 FR 25001, July 9, 1986]

PART 433—METAL FINISHING POINT SOURCE CATEGORY

Subpart A—Metal Finishing Subcategory

Sec.

AUTHORITY: Secs. 301, 304(b), (c), (e), and (g), 306(b) and (c), 307(b) and (c), 308 and 501 of the Clean Water Act (the Federal Water Pollution Control Act Amendments of 1971, as amended by the Clean Water Act of 1977) (the ''Act''); 33 U.S.C. 1311, 1314(b) (c), (e), and (g), 1316(b) and (c), 1317(b) and (c), 1318 and 1361; 86 Stat. 816, Pub. L. 92–500; 91 Stat. 1567, Pub. L. 95–217.

SOURCE: 48 FR 32485, July 15, 1983, unless otherwise noted.

Subpart A—Metal Finishing Subcategory

§ 433.10 Applicability; description of the metal finishing point source category.

(a) Except as noted in paragraphs (b) and (c), of this section, the provisions of this subpart apply to plants which perform any of the following six metal finishing operations on any basis material: Electroplating, Electroless Plating, Anodizing, Coating (chromating, phosphating, and coloring), Chemical Etching and Milling, and Printed Circuit Board Manufacture. If any of those six operations are present, then this part applies to discharges from those operations and also to discharges from any of the following 40 process operations: Cleaning, Machining, Grinding, Polishing, Tumbling, Burnishing, Impact Deformation, Pressure Deformation, Shearing, Heat Treating, Thermal Cutting, Welding, Brazing, Soldering, Flame Spraying, Sand Blasting, Other Abrasive Jet Machining, Electric Discharge Machining, Electrochemical Machining, Electron Beam Machining, Laser Beam Machining, Plasma Arc Machining, Ultrasonic Machining, Sintering, Laminating, Hot Dip Coating, Sputtering, Vapor Plating, Thermal Infusion, Salt Bath Descaling, Solvent Degreasing, Paint Stripping, Painting, Electrostatic Painting, Electropainting, Vacuum Metalizing, Assembly, Calibration, Testing, and Mechanical Plating.

(b) In some cases effluent limitations and standards for the following industrial categories may be effective and

applicable to wastewater discharges from the metal finishing operations listed above. In such cases these part 433 limits shall not apply and the following regulations shall apply:

Nonferrous metal smelting and refining (40 CFR part 421)
Coil coating (40 CFR part 465)
Porcelain enameling (40 CFR part 466)
Battery manufacturing (40 CFR part 461)
Iron and steel (40 CFR part 420)
Metal casting foundries (40 CFR part 464)
Aluminum forming (40 CFR part 467)
Copper forming (40 CFR part 468)
Plastic molding and forming (40 CFR part 463)
Nonferrous forming (40 CFR part 471)
Electrical and electronic components (40 CFR part 469)

(c) This part does not apply to:

(1) Metallic platemaking and gravure cylinder preparation conducted within or for printing and publishing facilities; and

(2) Existing indirect discharging job shops and independent printed circuit board manufacturers which are covered by 40 CFR part 413.)

[48 FR 32485, July 15, 1983; 48 FR 43682, Sept. 26, 1983; 48 FR 45105, Oct. 3, 1983; 51 FR 40421, Nov. 7, 1986]

§ 433.11 Specialized definitions.

The definitions set forth in 40 CFR part 401 and the chemical analysis methods set forth in 40 CFR part 136 are both incorporated here by reference. In addition, the following definitions apply to this part:

(a) The term ''T'', as in ''Cyanide, T'', shall mean total.

(b) The term ''A'', as in ''Cyanide A'', shall mean amenable to alkaline chlorination.

(c) The term ''job shop'' shall mean a facility which owns not more than 50% (annual area basis) of the materials undergoing metal finishing.

(d) The term ''independent'' printed circuit board manufacturer shall mean a facility which manufacturers printed circuit boards principally for sale to other companies.

(e) The term ''TTO'' shall mean total toxic organics, which is the summation of all quantifiable values greater than .01 milligrams per liter for the following toxic organics:

Acenaphthene
Acrolein
Acrylonitrile
Benzene
Benzidine
Carbon tetrachloride (tetrachloromethane)
Chlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobenzene
1,2,-Dichloroethane
1,1,1-Trichloroethane
Hexachloroethane
1,1-Dichloroethane
1,1,2-Trichloroethane
1,1,2,2-Tetrachloroethane
Chloroethane
Bis (2-chloroethyl) ether
2-Chloroethyl vinyl ether (mixed)
2-Chloronaphthalene
2,4,6-Trichlorophenol
Parachlorometa cresol
Chloroform (trichloromethane)
2-Chlorophenol
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3,3-Dichlorobenzidine
1,1-Dichloroethylene
1,2-Trans-dichloroethylene
2,4-Dichlorophenol
1,2-Dichloropropane
1,3-Dichloropropylene (1,3-dichloropropene)
2,4-Dimethylphenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
1,2-Diphenylhydrazine
Ethylbenzene
Fluoranthene
4-Chlorophenyl phenyl ether
4-Bromophenyl phenyl ether
Bis (2-chloroisopropyl) ether
Bis (2-chloroethoxy) methane
Methylene chloride (dichloromethane)
Methyl chloride (chloromethane)
Methyl bromide (bromomethane)
Bromoform (tribromomethane)
Dichlorobromomethane
Chlorodibromomethane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
2-Nitrophenol
4-Nitrophenol
2,4-Dinitrophenol
4,6-Dinitro-o-cresol
N-nitrosodimethylamine
N-nitrosodiphenylamine
N-nitrosodi-n-propylamine
Pentachlorophenol
Phenol
Bis (2-ethylhexyl) phthalate
Butyl benzyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Diethyl phthalate
Dimethyl phthalate

1,2-Benzanthracene
(benzo(a)anthracene)
Benzo(a)pyrene (3,4-benzopyrene)
3,4-Benzofluoranthene (benzo(b)fluoranthene)
11,12-Benzofluoranthene
(benzo(k)fluoranthene)
Chrysene
Acenaphthylene
Anthracene
1,12-Benzoperylene (benzo(ghi)perylene)
Fluorene
Phenanthrene
1,2,5,6-Dibenzanthracene
(dibenzo(a,h)anthracene)
Indeno(1,2,3-cd) pyrene (2,3-o-phenlene pyrene)
Pyrene
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl chloride (chloroethylene)
Aldrin
Dieldrin
Chlordane (technical mixture and metabolites)
4,4-DDT
4,4-DDE (p,p-DDX)
4,4-DDD (p,p-TDE)
Alpha-endosulfan
Beta-endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide
(BHC-hexachlorocyclohexane)
Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC
(PCB-polychlorinated biphenyls)
PCB-1242 (Arochlor 1242)
PCB-1254 (Arochlor 1254)
PCB-1221 (Arochlor 1221)
PCB-1232 (Arochlor 1232)
PCB-1248 (Arochlor 1248)
PCB-1260 (Arochlor 1260)
PCB-1016 (Arochlor 1016)
Toxaphene
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)

[48 FR 32485, July 15, 1983; 48 FR 43682, Sept. 26, 1983, as amended at 51 FR 40421, Nov. 7, 1986]

§ 433.12 Monitoring requirements.

(a) In lieu of requiring monitoring for TTO, the permitting authority (or, in the case of indirect dischargers, the control authority) may allow dischargers to make the following certification statement: ''Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation [or pretreatment standard] for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting [or control] authority.'' For direct dischargers, this statement is to be included as a ''comment'' on the Discharge Monitoring Report required by 40 CFR 122.44(i), formerly 40 CFR 122.62(i). For indirect dischargers, the statement is to be included as a comment to the periodic reports required by 40 CFR 403.12(e). If monitoring is necessary to measure compliance with the TTO standard, the industrial discharger need analyse for only those pollutants which would reasonably be expected to be present.

(b) In requesting the certification alternative, a discharger shall submit a solvent management plan that specifies to the satisfaction of the permitting authority (or, in the case of indirect dischargers, the control authority) the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater. For direct dischargers, the permitting authority shall incorporate the plan as a provision of the permit.

(c) Self-monitoring for cyanide must be conducted after cyanide treatment and before dilution with other streams. Alternatively, samples may be taken of the final effluent, if the plant limitations are adjusted based on the dilution ratio of the cyanide waste stream flow to the effluent flow.

(Approved by the Office of Management and Budget under control number 2040–0074)

[48 FR 32485, July 15, 1983; 48 FR 43682, Sept. 26, 1983, as amended at 49 FR 34823, Sept. 4, 1984]

§ 433.13 Effluent limitations representing the degree of effluent reduction attainable by applying the best practicable control technology currently available (BPT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by applying the best practicable control technology currently available (BPT):

BPT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cadmium (T)	0.69	0.26
Chromium (T)	2.77	1.71
Copper (T)	3.38	2.07
Lead (T)	0.69	0.43
Nickel (T)	3.98	2.38
Silver (T)	0.43	0.24
Zinc (T)	2.61	1.48
Cyanide (T)	1.20	0.65
TTO	2.13	.....
Oil & Grease	52	26
TSS	60	31
pH	(1)	(1)

[1] Within 6.0 to 9.0.

(b) Alternatively, for industrial facilities with cyanide treatment, and upon agreement between a source subject to those limits and the pollution control authority, the following amenable cyanide limit may apply in place of the total cyanide limit specified in paragraph (a) of this section:

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cyanide (A)	0.86	0.32

(c) No user subject to the provisions of this subpart shall augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this limitation.

§ 433.14 Effluent limitations representing the degree of effluent reduction attainable by applying the best available technology economically achievable (BAT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by applying the best available technology economically achievable (BAT):

BAT EFFLUENT LIMITATIONS

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cadmium (T)	0.69	0.26
Chromium (T)	2.77	1.71
Copper (T)	3.38	2.07
Lead (T)	0.69	0.43
Nickel (T)	3.98	2.38
Silver (T)	0.43	0.24
Zinc (T)	2.61	1.48
Cyanide (T)	1.20	0.65
TTO	2.13	.....

(b) Alternatively, for industrial facilities with cyanide treatment, and upon agreement between a source subject to those limits and the pollution control authority, the following amenable cyanide limit may apply in place of the total cyanide limit specified in paragraph (a) of this section:

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cyanide (A)	0.86	0.32

(c) No user subject to the provisions of this subpart shall augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this limitation.

§ 433.15 Pretreatment standards for existing sources (PSES).

(a) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following

pretreatment standards for existing sources (PSES):

PSES FOR ALL PLANTS EXCEPT JOB SHOPS AND INDEPENDENT PRINTED CIRCUIT BOARD MANUFACTURERS

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cadmium (T)	0.69	0.26
Chromium (T)	2.77	1.71
Copper (T)	3.38	2.07
Lead (T)	0.69	0.43
Nickel (T)	3.98	2.38
Silver (T)	0.43	0.24
Zinc (T)	2.61	1.48
Cyanide (T)	1.20	0.65
TTO	2.13	

(b) Alternatively, for industrial facilities with cyanide treatment, upon agreement between a source subject to those limits and the pollution control authority. The following amenable cyanide limit may apply in place of the total cyanide limit specified in paragraph (a) of this section:

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cyanide (A)	0.86	0.32

(c) No user introducing wastewater pollutants into a publicly owned treatment works under the provisions of this subpart shall augment the use of process wastewater as a partial or total substitute for adequate treatment to achieve compliance with this standard.

(d) An existing source submitting a certification in lieu of monitoring pursuant to §433.12 (a) and (b) of this regulation must implement the toxic organic management plan approved by the control authority.

(e) An existing source subject to this subpart shall comply with a daily maximum pretreatment standard for TTO of 4.57 mg/l.

(f) Compliance with the provisions of paragraph (c), (d), and (e) of this section shall be achieved as soon as possible, but not later than June 30, 1984, however metal finishing facilities which are also covered by part 420 (iron and steel) need not comply before July 10, 1985. Compliance with the provisions of paragraphs (a) and (b) of this section shall be achieved as soon as possible, but not later than February 15, 1986.

[48 FR 32485, July 15, 1983, as amended at 48 FR 41410, Sept. 15, 1983; 48 FR 43682, Sept. 26, 1983]

§ 433.16 New source performance standards (NSPS).

(a) Any new source subject to this subpart must achieve the following performance standards:

NSPS

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cadmium (T)	0.11	0.07
Chromium (T)	2.77	1.71
Copper (T)	3.38	2.07
Lead (T)	0.69	0.43
Nickel (T)	3.98	2.38
Silver (T)	0.43	0.24
Zinc (T)	2.61	1.48
Cyanide (T)	1.20	0.65
TTO	2.13	
Oil and Grease	52	26
TSS	60	31
pH	[1]	[1]

[1] Within 6.0 to 9.0.

(b) Alternatively, for industrial facilities with cyanide treatment, and upon agreement between a source subject to those limits and the pollution control authority, the following amenable cyanide limit may apply in place of the total cyanide limit specified in paragraph (a) of this section:

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cyanide (A)	0.86	0.32

(c) No user subject to the provisions of this subpart shall augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this limitation.

[48 FR 32485, July 15, 1983; 48 FR 43682, Sept. 26, 1983]

§ 433.17 Pretreatment standards for new sources (PSNS).

(a) Except as provided in 40 CFR 403.7, any new source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for new sources (PSNS):

PSNS

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cadmium (T)	0.11	0.07
Chromium (T)	2.77	1.71
Copper (T)	3.38	2.07
Lead (T)	0.69	0.43
Nickel (T)	3.98	2.38
Silver (T)	0.43	0.24
Zinc (T)	2.61	1.48
Cyanide (T)	1.20	0.65
TTO	2.13	

(b) Alternatively, for industrial facilities with cyanide treatment, and upon agreement between a source subject to these limits and the pollution control authority, the following amenable cyanide limit may apply in place of the total cyanide limit specified in paragraph (a) of this section:

Pollutant or pollutant property	Maximum for any 1 day	Monthly average shall not exceed
	Milligrams per liter (mg/l)	
Cyanide (A)	0.86	0.32

(c) No user subject to the provisions of this subpart shall augment the use of process wastewater or otherwise dilute the wastewater as a partial or total substitute for adequate treatment to achieve compliance with this limitation.

(d) An existing source submitting a certification in lieu of monitoring pursuant to §433.12 (a) and (b) of this regulation must implement the toxic organic management plan approved by the control authority.

[48 FR 32485, July 15, 1983; 48 FR 43682, Sept. 26, 1983]

PART 434—COAL MINING POINT SOURCE CATEGORY BPT, BAT, BCT LIMITATIONS AND NEW SOURCE PERFORMANCE STANDARDS

Subpart A—General Provisions

Sec.

Subpart B—Coal Preparation Plants and Coal Preparation Plant Associated Areas

Subpart C—Acid or Ferruginous Mine Drainage

Subpart D—Alkaline Mine Drainage

Appendix B – Local Limits Evaluation

Local Limits Evaluation

Local Limits Determination Based on NPDES Daily Effluent Limits **TABLE 1**

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE — MAXIMUM LOADING — INDUSTRIAL

Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Daily Limit (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.004	1.0	50	26.1		0.996	435.348	0	348.2784	41.76	20
Arsenic						0	-	0	-	-	
CBOD	0.004	1.0	95	40		0.996	6672	0	5337.6	640	20
Cadmium						0	-	0	-	-	
Chromium						0	-	0	-	-	
Hex. Chrom.						0	-	0	-	-	
COD						0	-	0	-	-	
Copper						0	-	0	-	-	
Cyanide						0	-	0	-	-	
Lead						0	-	0	-	-	
Mercury						0	-	0	-	-	
Nickel						0	-	0	-	-	
Oil & Grease						0	-	0	-	-	
Phosphorus						0	-	0	-	-	
Silver						0	-	0	-	-	
TSS	0.004	1.0	97	45		0.996	12510	0	10008	1200	20
TTO						0	-	0	-	-	
Zinc						0	-	0	-	-	

(Qind) Permitted "daily average" industrial user flow in million gallons per day (MGD).
(Qpotw) POTW's average flow rate in million gallons per day (MGD).
(Rpotw) Removal efficiency across POTW as a percent (headworks to final effluent).
(Ccrit) NPDES "weekly average" permit limit for a particular pollutant in mg/l.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rpotw}$$

::

TABLE 2

Local Limits Determination Based on NPDES Monthly Effluent Limits

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE						MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Monthly Limit (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.004	1	50	17.4		0.996	290.232	0	232.1856	27.84	20
Arsenic						0	-	0	-	-	
CBOD	0.004	1	95	25		0.996	4170	0	3336	400	20
Cadmium						0	-	0	-	-	
Chromium						0	-	0	-	-	
Hex. Chrom.						0	-	0	-	-	
COD						0	-	0	-	-	
Copper						0	-	0	-	-	
Cyanide						0	-	0	-	-	
Lead						0	-	0	-	-	
Mercury						0	-	0	-	-	
Nickel						0	-	0	-	-	
Oil & Grease						0	-	0	-	-	
Phosphorus						0	-	0	-	-	
Silver						0	-	0	-	-	
TSS	0.004	1	97	30		0.996	8340	0	6672	800	20
TTO						0	-	0	-	-	
Zinc						0	-	0	-	-	

(Qind) Permitted "daily average" industrial user flow in million gallons per day (MGD).
(Qpotw) POTW's average flow rate in million gallons per day (MGD).
(Rpotw) Removal efficiency across POTW as a percent (headworks to final effluent).
(Ccrit) NPDES "monthly average" permit limit for a particular pollutant in mg/l.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rpotw}$$

::

TABLE 3

Local Limits Determination Based on Activated Sludge Inhibition Level

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE					MAXIMUM LOADING			INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rprim)	Activated Sludge Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.004	1.0	0	480	0	0.996	4003.2	0	3602.88	108000	10
Arsenic	0.004	1.0	0	0.1	0.007	0.996	0.834	0.05814648	0.6924535	20.757	10
BOD						0	-	0	-	-	
Cadmium	0.004	1.0	15	1	0.008	0.996	9.811764706	0.06645312	8.7641351	262.71388	10
Chromium	0.004	1.0	27	1	0.034	0.996	11.42465753	0.28242576	9.999766	299.75318	10
Hex. Chrom.	0.004	1.0	27	1	0.028	0.996	11.42465753	0.23258592	10.049606	301.24718	10
COD						0	-	0	-	-	
Copper	0.004	1.0	22	1	0.14	0.996	10.69230769	1.1629296	8.4601473	253.60154	10
Cyanide	0.004	1.0	27	0.1	0.082	0.996	1.142465753	0.68114448	0.3470747	10.403918	10
Lead	0.004	1.0	57	1	0.058	0.996	19.39534884	0.48178512	16.974029	508.81381	10
Mercury	0.004	1.0	10	0.1	0.002	0.996	0.926666667	0.01661328	0.8173867	24.502	10
Nickel	0.004	1.0	14	1	0.047	0.996	9.697674419	0.39041208	8.3374949	249.92491	10
Oil & Grease						0	-	0	-	-	
Phosphorus						0	-	0	-	-	
Silver						0	-	0	-	-	
TSS						0	-	0	-	-	
TTO						0	-	0	-	-	
Zinc	0.004	1.0	27	0.3	0.231	0.996	3.42739726	1.91883384	1.1658237	34.946753	10

(Qind) Permitted "daily average" industrial user flow in million gallons per day (MGD).
(Qpotw) POTW's average flow rate in million gallons per day (MGD).
(Rprim) POTW removal efficiency across primary treatment as a percent (headworks to primary treated effluent).
(Ccrit) Activated sludge threshold inhibition level in mg/l.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rprim}$$

::

TABLE 4

Local Limits Determination Based on Nitrification Inhibition Level

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE					MAXIMUM LOADING			INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rprim)	Nitrification Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N						0	-	0	-	-	
Arsenic	0.004	1.0	0	1.5	0.007	0.996	12.51	0.05814648	11.200854	335.757	10
BOD						0	-	0	-	-	
Cadmium	0.004	1.0	15	5.2	0.008	0.996	51.02117647	0.06645312	45.852606	1374.4786	10
Chromium	0.004	1.0	27	0.25	0.034	0.996	2.856164384	0.28242576	2.2881222	68.588795	10
Hex. Chrom.	0.004	1.0	27	1	0.028	0.996	11.42465753	0.23258592	10.049606	301.24718	10
COD						0	-	0	-	-	
Copper	0.004	1.0	22	0.27	0.14	0.996	2.886923077	1.1629296	1.1466089	34.370769	20
Cyanide	0.004	1.0	27	0.34	0.082	0.996	3.884383562	0.68114448	2.8148007	84.376521	10
Lead	0.004	1.0	57	0.5	0.058	0.996	9.697674419	0.48178512	8.2461219	247.18591	10
Mercury						0	-	0	-	-	
Nickel	0.004	1.0	14	0.25	0.047	0.996	2.424418605	0.39041208	1.7915647	53.703977	10
Oil & Grease						0	-	0	-	-	
Phosphorus						0	-	0	-	-	
Silver						0	-	0	-	-	
TSS						0	-	0	-	-	
TTO						0	-	0	-	-	
Zinc	0.004	1.0	27	0.29	0.231	0.996	3.313150685	1.91883384	0.7316867	21.933055	20
Chloroform	0.004	1.0	14	10	0.009	0.996	96.97674419	0.07475976	87.20431	2614.0381	10

(Qind) Permitted "daily average" industrial user flow in million gallons per day (MGD).

(Qpotw) POTW's average flow rate in million gallons per day (MGD).

(Rprim) POTW removal efficiency across secondary treatment as a percent (headworks to primary treated effluent).

(Ccrit) Nitrification threshold inhibition level in mg/l.

(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.

(Qdom) Domestic/commercial background flow in MGD.

(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).

(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

(Lind) Maximum allowable industrial loading to the POTW in pounds per day.

(Cind) Industrial allowable local limit for a given pollutant in mg/l.

(SF) Safety factor as a percent.

8.34 Unit conversion factor

Lhw = 8.34 * Ccrit * Qpotw

1 - Rsec

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Local Limits Evaluation

TABLE 5

Local Limits Determination Based on USEPA 503 Sludge Regulations (Conservative Pollutants) - N/A, Sludge is Landfilled

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING			INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qsldg)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	503 Sludge Criteria (mg/kg) (Cslcrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N								0	-	0	-	-	
Arsenic								0	-	0	-	-	
BOD								0	-	0	-	-	
Cadmium								0	-	0	-	-	
Chromium								0	-	0	-	-	
Hex. Chrom.								0	-	0	-	-	
COD								0	-	0	-	-	
Copper								0	-	0	-	-	
Cyanide								0	-	0	-	-	
Lead								0	-	0	-	-	
Mercury								0	-	0	-	-	
Nickel								0	-	0	-	-	
Oil & Grease								0	-	0	-	-	
Phosphorus								0	-	0	-	-	
Silver								0	-	0	-	-	
TSS								0	-	0	-	-	
TTO								0	-	0	-	-	
Zinc								0	-	0	-	-	

(Qind) Permitted "daily average" industrial user flow in million gallons per day (MGD).

(Qpotw) POTW's average flow rate in million gallons per day (MGD).

(Qsldg) Sludge flow to disposal in MGD.

(PS) Percent solids of sludge to disposal.

(Rpotw) Removal efficiency across POTW as a percent (headworks to final effluent).

(Cslcrit) 503 sludge criteria in mg/kg dry sludge.

(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.

(Qdom) Domestic/commercial background flow in MGD.

(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).

(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

(Lind) Maximum allowable industrial loading to the POTW in pounds per day.

(Cind) Industrial allowable local limit for a given pollutant in mg/l.

(SF) Safety factor as a percent.

8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Cslcrit * (PS/100) * Qsldg}{Rpotw}$$

::

TABLE 6

Local Limits Determination Based on State Sludge Criteria (Conservative Pollutants) - N/A, Sludge is Landfilled

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING			INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qsldg)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	State Sludge Criteria (mg/kg) (Cslcrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N								0	-	0	-	-	
Arsenic								0	-	0	-	-	
BOD								0	-	0	-	-	
Cadmium								0	-	0	-	-	
Chromium								0	-	0	-	-	
Hex. Chrom.								0	-	0	-	-	
COD								0	-	0	-	-	
Copper								0	-	0	-	-	
Cyanide								0	-	0	-	-	
Lead								0	-	0	-	-	
Mercury								0	-	0	-	-	
Nickel								0	-	0	-	-	
Oil & Grease								0	-	0	-	-	
Phosphorus								0	-	0	-	-	
Silver								0	-	0	-	-	
TSS								0	-	0	-	-	
TTO								0	-	0	-	-	
Zinc								0	-	0	-	-	

(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw)	POTW's average flow rate in million gallons per day (MGD).
(Qsldg)	Sludge flow to disposal in MGD.
(PS)	Percent solids of sludge to disposal.
(Rpotw)	Removal efficiency across POTW as a percent.
(Cslcrit)	State sludge criteria in mg/kg dry sludge.
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.
(Qdom)	Domestic/commercial background flow in MGD.
(Lhw)	Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom)	Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind)	Maximum allowable industrial loading to the POTW in pounds per day.
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.
(SF)	Safety factor as a percent.
8.34	Unit conversion factor
Lhw =	$\frac{8.34 * Cslcrit * (PS/100) * Qsldg}{Rpotw}$
::	

TABLE 7

Local Limits Determination Based on Chronic/Human Health Water Quality Standards

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING			INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Upstream Flow (MGD) (Qstr)	Upstream Conc. (mg/l) (Cstr)	Removal Efficiency (%) (Rpotw)	Chronic WQS (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N								0	-	0	-	-	
Arsenic	0.004	1.0	600	0	45	0.068	0.007	0.996	619.70749	0.0581465	557.6786	16716.98	10
BOD								0	-	0	-	-	
Cadmium*	0.004	1.0	600	0	67	0.0313	0.008	0.996	475.41285	0.0664531	427.80512	12823.89	10
Chromium*								0	-	0	-	-	
Hex. Chrom.	0.004	1.0	600	0	82	0.247	0.028	0.996	6878.0443	0.2325859	6190.0073	185551.8	10
COD								0	-	0	-	-	
Copper*	0.004	1.0	600	0	86	0.0089	0.14	0.996	318.64161	1.1629296	285.61452	8561.586	10
Cyanide	0.004	1.0	600	0	69	0.001	0.082	0.996	16.168839	0.6811445	13.87081	415.7917	10
Lead*	0.004	1.0	600	0	61	0.0245	0.058	0.996	314.87777	0.4817851	282.90821	8480.462	10
Mercury	0.004	1.0	600	0	67	0.000025	0.002	0.996	0.3797227	0.0166133	0.3251372	9.746318	10
Nickel*	0.004	1.0	600	0	42	0.019	0.047	0.996	164.19734	0.3904121	147.3872	4418.081	10
Oil & Grease								0	-	0	-	-	
Phosphorus								0	-	0	-	-	
Silver								0	-	0	-	-	
TSS								0	-	0	-	-	
TTO								0	-	0	-	-	
Zinc*	0.004	1.0	600	0	79	0.281	0.231	0.996	6706.9883	1.9188338	6034.3706	180886.4	10
Selenium	0.004	1.0	600	0	50	0.071	0	0.996	711.75228	0	640.57705	19201.95	10
Human Health													
Antimony	0.004	1.0	600	0	0	0.64	0	0.996	3207.8976	0	2887.1078	86544	10
Chloroform	0.004	1.0	600	0	67	0.47	0.009	0.996	7138.7873	0.0747598	6424.8338	192590.9	10
Dichlorobromomethane	0.004	1.0	600	0	0	0.017	0	0.996	85.20978	0	76.688802	2298.825	10

(Qind) Permitted "daily average" industrial user flow in million gallons per day (MGD).
(Qpotw) POTW's average flow rate in million gallons per day (MGD).
(Qstr) Receiving stream (upstream) flow **(expressed as dilution factor)** in MGD.
(Cstr) Receiving stream background level in mg/l.
(Rpotw) Removal efficiency across POTW as a percent (headworks to final effluent).
(Ccrit) State chronic water quality standard for a particular pollutant in mg/l (**expressed in total recoverable form**).
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * (Ccrit * (Qstr + Qpotw) - (Cstr * Qstr))}{1 - Rpotw}$$

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Local Limits Evaluation

TABLE 8

Local Limits Determination Based on Acute Water Quality Standards

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING			INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Upstream Flow (MGD) (Qstr)	Upstream Conc. (mg/l) (Cstr)	Removal Efficiency (%) (Rpotw)	Acute WQS (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N								0	-	0	-	-	
Arsenic	0.004	1.0	600	0	45	0.131	0.007	0.996	1193.8483	0.0581465	1074.4053	32206.39	10
BOD								0	-	0	-	-	
Cadmium*	0.004	1.0	600	0	67	0.131	0.008	0.996	1989.7471	0.0664531	1790.7059	53678.24	10
Chromium*								0	-	0	-	-	
Hex. Chrom.	0.004	1.0	600	0	82	5.439	0.028	0.996	151456.21	0.2325859	136310.35	4086042	10
COD								0	-	0	-	-	
Copper*	0.004	1.0	600	0	86	0.0138	0.14	0.996	494.07351	1.1629296	443.50323	13294.46	10
Cyanide								0	-	0	-	-	
Lead*	0.004	1.0	600	0	61	0.635	0.058	0.996	8161.1177	0.4817851	7344.5241	220159.6	10
Mercury	0.004	1.0	600	0	67	0.0018	0.002	0.996	27.340036	0.0166133	24.589419	737.0929	10
Nickel*	0.004	1.0	600	0	42	0.171	0.047	0.996	1477.7761	0.3904121	1329.6081	39856.36	10
Oil & Grease								0	-	0	-	-	
Phosphorus								0	-	0	-	-	
Silver								0	-	0	-	-	
TSS								0	-	0	-	-	
TTO								0	-	0	-	-	
Zinc	0.004	1.0	600	0	79	0.313	0.231	0.996	7470.7734	1.9188338	6721.7773	201492.1	10
Selenium	0.004	1.0	600	0	50	0.290	0	0.996	2907.1572	0	2616.4415	78430.5	10

(Qind) Permitted "daily average" industrial user flow in million gallons per day (MGD).
(Qpotw) POTW's average flow rate in million gallons per day (MGD).
(Qstr) Receiving stream (upstream) flow (**expressed as dilution factor**) in MGD.
(Cstr) Receiving stream background level in mg/l.
(Rpotw) Removal efficiency across POTW as a percent (headworks to final effluent).
(Ccrit) State acute water quality standard for a particular pollutant in mg/l (**expressed in total recoverable form**).
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * (Ccrit * (Qstr + Qpotw) - (Cstr * Qstr))}{1 - Rpotw}$$

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TABLE 9

Local Limits Determination Based on Anaerobic Digester Inhibition Level - N/A, Garden City WPCP does not have an anaerobic digester

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE						MAXIMUM LOADING			INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow to Digester (MGD) (Qdig)	Removal Efficiency (%) (Rpotw)	Anaerobic Digester Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercia (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N							0	-	0	-	-	
Arsenic							0	-	0	-	-	
BOD							0	-	0	-	-	
Cadmium							0	-	0	-	-	
Chromium							0	-	0	-	-	
Hex. Chrom.							0	-	0	-	-	
COD							0	-	0	-	-	
Copper							0	-	0	-	-	
Cyanide							0	-	0	-	-	
Lead							0	-	0	-	-	
Mercury							0	-	0	-	-	
Nickel							0	-	0	-	-	
Oil & Grease							0	-	0	-	-	
Phosphorus							0	-	0	-	-	
Silver							0	-	0	-	-	
TSS							0	-	0	-	-	
TTO							0	-	0	-	-	
Zinc							0	-	0	-	-	

(Qind) Permitted "daily average" industrial user flow in million gallons per day (MGD).
(Qpotw) POTW's average flow rate in million gallons per day (MGD).
(Qdig) Sludge flow to digester in MGD.
(Rpotw) Removal efficiency across POTW as a percent (headworks to final effluent).
(Ccrit) Anaerobic digester threshold inhibition level in mg/l.
(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.
(Qdom) Domestic/commercial background flow in MGD.
(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind) Maximum allowable industrial loading to the POTW in pounds per day.
(Cind) Industrial allowable local limit for a given pollutant in mg/l.
(SF) Safety factor as a percent.
8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qdig}{Rpotw}$$

TABLE 10

Local Limits Determination Based on Most Stringent Criteria or Domestic Levels

MONTHLY AVERAGE INDUSTRIAL EFFLUENT LIMITS - USING TOTAL INDUSTRIAL FLOW

Pollutant	Local Limit (mg/l)	Basis in Derivation of Limit	Local Limit Loading (lbs/day)	Sewer Use Ordinance (mg/l)
Ammonia-N	27.84	P	0.9287424	
Arsenic	20.757	I	0.6924535	0.09
BOD	400	P	13.344	
Cadmium	262.7138824	I	8.7641351	0.9
Chromium	68.58879452	I	2.2881222	0.9
Hex. Chrom.	301.2471781	I	10.049606	
COD				
Copper	34.37076923	I	1.1466089	0.9
Cyanide	10.40391781	I	0.3470747	0.09
Lead	247.185907	I	8.2461219	0.09
Mercury	9.746318182	W	0.3251372	0.09
Nickel	53.70397674	I	1.7915647	0.9
Oil & Grease				
Phosphorus				
Silver				0.23
TSS	800	P	26.688	
TTO				
Zinc	21.93305479	I	0.7316867	0.07

D	Local Limit based on domestic or default values.
I	Local Limit based on activated sludge, nitrification or digester inhibition levels.
P	Local Limit based on NPDES Permit effluent limits.
S	Local Limit based on sludge regulations or criteria.
W	Local Limit based on chronic or acute water quality standards.
C	Local Limit based on Categorical Standard

EPA Guidance http://water.epa.gov/polwaste/npdes/pretreatment/Pretreatment-Standards-Limits.cfm#local

Metals Conversion Calculator - Coastal and Marine Estuarine Waters

Permit Name: Precision Protective Coatings, Inc.

Pretreatment Permit No.: GAP050297

Stream Data:

Receiving stream Hardness:	**25**	mg/L
Upstream TSS:	**10**	mg/L
7Q10:	**Tidal**	ft^3/s
	--	gal/day
1Q10:	**Tidal**	ft^3/s
	--	gal/day

POTW Effluent Data:

Flow	**1,000,000**	gal/day
TSS	**30.00**	mg/L
Instream TSS:	10.03	mg/L
Dilution Factor	600	

Acute Water Quality Criteria (WQC_{Acute})

Metal	K_{PO}	α	f_D	Total Recoverable WQC_{Acute} (µg/L)	Dissolved WQC_{Acute} (µg/L)
Arsenic	4.80.E+05	-0.729	0.527	131	69
Cadmium	4.00.E+06	-1.131	0.253	131	33
Chromium VI	3.36.E+06	-0.930	0.202	5439	1100
Copper	1.04.E+06	-0.744	0.347	13.8	4.8
Lead	3.10.E+05	-0.186	0.331	635	210
Mercury	NA	NA	NA	1.8	1.8
Nickel	4.90.E+05	-0.572	0.432	171	74
Zinc	1.25.E+06	-0.704	0.288	313	90
Selenium	NA	NA	NA	290	290

$$f_D = \frac{1}{1 + K_{PO} \times TSS_{Instream}(mg/L)^{(1+\alpha)} \times 10^{-6}}$$

Chronic Water Quality Criteria ($WQC_{Chronic}$)

Metal	K_{PO}	α	f_D	Total Recoverable $WQC_{Chronic}$ (µg/L)	Dissolved $WQC_{Chronic}$ (µg/L)
Arsenic	4.80.E+05	-0.729	0.527	68	36
Cadmium	4.00.E+06	-1.131	0.253	31.3	7.9
Chromium VI	3.36.E+06	-0.930	0.202	247	50
Copper	1.04.E+06	-0.744	0.347	8.9	3.1
Lead	3.10.E+05	-0.186	0.331	24.5	8.1
Mercury	NA	NA	NA	0.025	0.025
Nickel	4.90.E+05	-0.572	0.432	19.0	8.2
Zinc	1.25.E+06	-0.704	0.288	281	81
Selenium	NA	NA	NA	71	71

$$f_D = \frac{1}{1 + K_{PO} \times TSS_{Instream}(mg/L)^{(1+\alpha)} \times 10^{-6}}$$

NOTES:

*Water Quality Criteria (WQC) from State of Georgia Rules and Regulations 391-3-6-.03.

Local Limits Calculations - Supporting Data

Permit Name:	**Precision Protective Coatings, Inc.**
Permit No.:	**GAP050297**

Table No. 1 - Garden City WPCP Removal Efficiency

TSS		CBOD5	
Date	**Removal Efficiency (%)**	**Date**	**Removal Efficiency (%)**
6/1/2021	98	6/1/2021	96
5/1/2021	98	5/1/2021	95
4/1/2021	97	4/1/2021	96
3/1/2021	95	3/1/2021	95
2/1/2021	95	2/1/2021	93
1/1/2021	97	1/1/2021	95
12/1/2020	96	12/1/2020	94
11/1/2020	97	11/1/2020	94
10/1/2020	98	10/1/2020	95
9/1/2020	96	9/1/2020	94
8/1/2020	96	8/1/2020	94
7/1/2020	98	7/1/2020	96
6/1/2020	98	6/1/2020	96
5/1/2020	98	5/1/2020	97
4/1/2020	98	4/1/2020	95
3/1/2020	97	3/1/2020	95
2/1/2020	96	2/1/2020	95
1/1/2020	98	1/1/2020	96
12/1/2019	99	12/1/2019	96
11/1/2019	99	11/1/2019	97
10/1/2019	98	10/1/2019	96
9/1/2019	97	9/1/2019	97
8/1/2019	97	8/1/2019	96
7/1/2019	97	7/1/2019	96
Average	**97**	**Average**	**95**

Table No. 2 - Garden City WPCP Influent Loading

TSS		CBOD5	
Date	**Influent (mg/L)**	**Date**	**Influent (mg/L)**
6/1/2021	153	6/1/2021	153
5/1/2021	100	5/1/2021	147
4/1/2021	116	4/1/2021	116
3/1/2021	102	3/1/2021	114
2/1/2021	105	2/1/2021	112
1/1/2021	134	1/1/2021	124
12/1/2020	97	12/1/2020	113
11/1/2020	87	11/1/2020	101
10/1/2020	30	10/1/2020	125
9/1/2020	139	9/1/2020	121
8/1/2020	96	8/1/2020	97
7/1/2020	120	7/1/2020	158
6/1/2020	118	6/1/2020	158
5/1/2020	158	5/1/2020	179
4/1/2020	140	4/1/2020	141
3/1/2020	111	3/1/2020	136
2/1/2020	111	2/1/2020	131
1/1/2020	119	1/1/2020	178
12/1/2019	130	12/1/2019	165
11/1/2019	160	11/1/2019	171
10/1/2019	137	10/1/2019	125
9/1/2019	170	9/1/2019	141
8/1/2019	175	8/1/2019	--
7/1/2019	131	7/1/2019	--
Average	**107**	**Average**	**123**

Table No. 3 - Garden City WPCP Flow

Flow	
Date	**Monthly Average (MGD)**
6/1/2021	1.0
5/1/2021	0.9
4/1/2021	1.0
3/1/2021	1.4
2/1/2021	1.4
1/1/2021	1.0
12/1/2020	1.1
11/1/2020	1.0
10/1/2020	0.9
9/1/2020	1.0
8/1/2020	0.9
7/1/2020	0.9
6/1/2020	0.9
5/1/2020	0.9
4/1/2020	1.2
3/1/2020	1.3
2/1/2020	1.4
1/1/2020	1.2
12/1/2019	1.3
11/1/2019	1.3
10/1/2019	1.1
9/1/2019	0.9
8/1/2019	1.0
7/1/2019	1.0
Average	**1.0**

Appendix C – Sewer Use Ordinance

ARTICLE IV. - SEWERS AND SEWAGE DISPOSAL
DIVISION 1. - GENERALLY

Sec. 82-81. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

BOD, denoting biochemical oxygen demand, means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five days at 20 degrees Celsius expressed in milligrams per liter.

Building drain means that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five feet outside the inner face of the building wall.

Building sewer means the extension from the building drain to the public sewer or other place of disposal.

Combined sewer means a sewer receiving both surface runoff and sewage.

Garbage means solid wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the handling, storage and sale of produce.

Industrial wastes means the liquid wastes from industrial manufacturing processes, trade or business, as distinct from sanitary sewage.

Natural outlet means any outlet into a watercourse, pond, ditch, lake or other body of surface water or groundwater.

pH means the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

Properly shredded garbage means the wastes from the preparation, cooking and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch in any dimension.

Public sewer means a sewer in which all owners of abutting properties have equal rights, and which is controlled by public authority.

Sanitary sewer means a sewer which carries sewage and to which stormwater, surface water and groundwater are not intentionally admitted.

Sewage means a combination of the water-carried wastes from residences, business buildings, institutions and industrial establishments, together with such groundwater, surface water and stormwater as may be present.

Sewage treatment plant means any arrangement of devices and structures used for treating sewage.

Sewage works means all facilities for collecting, pumping, treating and disposing of sewage.

Sewer means a pipe or conduit for carrying sewage.

Slug means any discharge of water, sewage or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than 15 minutes more than five times the average 24-hour concentration or flows during normal operation.

Storm drain and storm sewer mean a sewer which carries stormwater and surface water and drainage, but excludes sewage and industrial wastes other than unpolluted cooling water.

Superintendent means the superintendent of waterworks of the city, or his authorized deputy, agent or representative.

Suspended solids means solids that either float on the surface of or are in suspension in water, sewage or other liquids, and which are removable by laboratory filtering.

Watercourse means a channel in which a flow of water occurs, either continuously or intermittently.

(Code 1976, § 5-2001)

Cross reference— Definitions and rules of construction generally, § 1-2.

Sec. 82-82. - Penalty for violation of article; liability for damage.

(a) Any person who shall be found guilty of violating any provision of this article, on conviction thereof in the municipal court, shall be punished as provided in section 1-13.

(b) Any person violating any of the provisions of this article shall become liable to the city for any expense, loss or damage occasioned the city by reason of such violation.

(Code 1976, § 5-2017)

Sec. 82-83. - Right of entry.

(a) The superintendent and other duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all properties for the purposes of

inspection, observation, measurement, sampling and testing in accordance with the provisions of this article.

(b) While performing the necessary work on private properties referred to in subsection (a) of this section, the superintendent or duly authorized employees of the city shall observe all safety rules applicable to the premises established by the company.

(Code 1976, § 5-2016)

Sec. 82-84. - Damaging or tampering with sewage works.

No unauthorized person shall maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the sewage works. Any person violating this section shall be subject to immediate arrest under a charge of disorderly conduct.

(Code 1976, § 5-2015)

Sec. 82-85. - Deposit of objectionable waste.

It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner on public or private property within the city or in any area under the jurisdiction of the city any human or animal excrement, garbage or other objectionable waste.

(Code 1976, § 5-2002(a))

Sec. 82-86. - Discharge of polluted water to natural outlet.

It shall be unlawful to discharge to any natural outlet within the city, or in any area under the jurisdiction of the city, any sewage or other polluted waters, except where suitable treatment has been provided in accordance with the provisions of this article.

(Code 1976, § 5-2002(b))

Sec. 82-87. - Privies, septic tanks, cesspools, etc.

Except as provided in this article, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of sewage.

(Code 1976, § 5-2002(c))

Sec. 82-88. - Connection with public sewer required for certain premises.

The owner of any house, building or property used for human occupancy, employment, recreation or other purposes, situated within the city and abutting on any street, alley or right-of-way in which there is now located or may in the future be located a public sanitary or combined

sewer of the city, is hereby required, at his expense, to install a direct connection with the proper public sewer in accordance with the provisions of this article within 90 days after date of official notice to do so, provided that the public sewer is within 100 feet of the property line.

(Code 1976, § 5-2002(d))

Secs. 82-89—82-100. - Reserved.

DIVISION 2. - PRIVATE DISPOSAL SYSTEMS

Sec. 82-101. - Use required when public sewer not available.

Where a public sanitary or combined sewer is not available under the provisions of section 82-88, the building sewer shall be connected to a private sewage disposal system complying with the provisions of this division.

(Code 1976, § 5-2003(a))

Sec. 82-102. - Permit.

Before commencement of construction of a private sewage disposal system, the owner shall first obtain a written permit signed by the superintendent. The application for such permit shall be made on a form furnished by the city, which the applicant shall supplement by any plans, specifications and other information as are deemed necessary by the superintendent. A permit and inspection fee of $10.00 shall be paid to the city at the time the application is filed.

(Code 1976, § 5-2003(b))

Sec. 82-103. - Inspection.

A permit for a private sewage disposal system shall not become effective until the installation is completed to the satisfaction of the superintendent. He shall be allowed to inspect the work at any stage of construction and, in any event, the applicant for the permit shall notify the superintendent when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within 72 hours of the receipt of notice by the superintendent.

(Code 1976, § 5-2003(c))

Sec. 82-104. - Specifications; minimum lot area.

The type, capacities, location and layout of a private sewage disposal system shall comply with all recommendations of the division of physical health of the state. No permit shall be issued for any private sewage disposal system employing subsurface soil absorption facilities where the area of the lot is less than 20,000 square feet. No septic tank or cesspool shall be permitted to discharge to any natural outlet.

(Code 1976, § 5-2003(d))

Sec. 82-105. - Operation and maintenance.

The owner of private sewage disposal facilities shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the city.

(Code 1976, § 5-2003(f))

Sec. 82-106. - Additional requirements.

No statement contained in this division shall be construed to interfere with any additional requirements that may be imposed by the state and county health officers.

(Code 1976, § 5-2003(g))

Sec. 82-107. - Abandonment on connection with public sewer.

(a) At such time as a public sewer becomes available to a property served by a private sewage disposal system, as provided in section 82-88, a direct connection shall be made to the public sewer in compliance with this article, and any septic tanks, cesspools and similar private sewage disposal facilities shall be abandoned and filled with suitable material.

(b) When a public sewer becomes available, the building sewer shall be connected to such sewer within 60 days and the private sewage disposal system shall be cleaned of sludge and filled with clean bank run gravel or dirt.

(Code 1976, § 5-2003(e), (h))

Secs. 82-108—82-120. - Reserved.

DIVISION 3. - BUILDING SEWERS AND CONNECTIONS

Sec. 82-121. - Permit required.

No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the superintendent.

(Code 1976, § 5-2004(a))

Sec. 82-122. - Application for permit; permit fee.

There shall be two classes of building sewer permits: one for residential and commercial service, and one for service to establishments producing industrial wastes. In either case, the owner or his agent shall make application on a special form furnished by the city. The permit application shall

be supplemented by any plans, specifications or other information considered pertinent in the judgment of the superintendent. A permit and inspection fee of $100.00 for a residential or commercial building sewer permit, and a negotiated fee based upon use for a permit for an industrial user producing industrial wastes, shall be paid to the city at the time the application is filed.

(Code 1976, § 5-2004(b))

Sec. 82-123. - Payment of costs; indemnification of city.

All costs and expense incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(Code 1976, § 5-2004(c))

Sec. 82-124. - Separate building sewer required for every building; exception.

A separate and independent building sewer shall be provided for every building; except that, where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.

(Code 1976, § 5-2004(d))

Sec. 82-125. - Use of old building sewers.

Old building sewers may be used in connection with new buildings only when they are found on examination and test by the superintendent to meet all requirements of this article.

(Code 1976, § 5-2004(e))

Sec. 82-126. - Specifications for building sewer.

The size, slope, alignment and materials of construction of a building sewer, and the methods to be used in excavating, placing the pipe, jointing, testing and backfilling the trench, shall all conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the ASTM and WEF Manual of Practice no. 9 shall apply.

(Code 1976, § 5-2004(f))

Sec. 82-127. - Elevation of building sewer.

Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.

(Code 1976, § 5-2004(g))

Sec. 82-128. - Connection of sources of surface runoff or groundwater to sanitary sewer prohibited.

No person shall make connection of roof downspouts, exterior foundation drains, areaway drains or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.

(Code 1976, § 5-2004(h))

Sec. 82-129. - Specifications for connection.

The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city, or in amplification thereof, the materials and procedures set forth in the ASTM and WEF Manual of Practice no. 9. All such connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the superintendent before installation.

(Code 1976, § 5-2004(i))

Sec. 82-130. - Inspection; supervision of connection.

The applicant for the building sewer permit shall notify the superintendent when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the superintendent or his representative.

(Code 1976, § 5-2004(j))

Sec. 82-131. - Excavations.

All excavations for building sewer installations shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the city.

(Code 1976, § 5-2004(k))

Secs. 82-132—82-140. - Reserved.

DIVISION 4. - USE OF PUBLIC SEWERS

Sec. 82-141. - Discharge of unpolluted water.

(a) No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water or unpolluted industrial process waters to any sanitary sewer.

(b) Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the superintendent. Industrial cooling water or unpolluted process waters may be discharged, on approval of the superintendent, to a storm sewer, combined sewer or natural outlet.

(Code 1976, §§ 5-2005, 5-2006)

Sec. 82-142. - Prohibited discharges.

No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

(1) Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas;

(2) Any waters or wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance or create any hazard in the receiving waters of the sewage treatment plant;

(3) Any waters or wastes having a pH lower than 6.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works; or

(4) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works, such as but not limited to ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails, and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.

(Code 1976, § 5-2007; Ord. of 9-20-93(2), §§ 1, 2)

Sec. 82-143. - Restricted discharges.

(a) No person shall discharge or cause to be discharged the following described substances, materials, waters or wastes to any public sewer if it appears likely in the opinion of the superintendent that such wastes can harm either the sewers, sewage treatment process or equipment, can have an adverse effect on the receiving stream, or can otherwise endanger life, limb or public property or constitute a nuisance. In forming his opinion as to the acceptability of these wastes, the superintendent will give consideration to such factors as the quantities of

subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant and other pertinent factors. The substances prohibited are:

(1) Any liquid or vapor having a temperature higher than 150 degrees Fahrenheit (65 degrees Celsius);

(2) Any water or waste containing fats, wax, grease or oils, whether emulsified or not, in excess of 100 milligrams per liter, or containing substances which may solidify or become viscous at temperatures between 32 and 150 degrees Fahrenheit (0 and 65 degrees Celsius);

(3) Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the superintendent;

(4) Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions, whether neutralized or not;

(5) Any waters or wastes containing iron, chromium, copper, zinc and similar objectionable or toxic substances, or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the superintendent for such materials;

(6) Any waters or wastes containing phenols or other taste- or odor-producing substances, in such concentrations exceeding limits which may be established by the superintendent as necessary, after treatment of the composite sewage, to meet the requirements of the state, federal or other public agencies having jurisdiction over such discharge to the receiving waters;

(7) Any radioactive wastes or isotopes of such halflife or concentration as may exceed limits established by the superintendent in compliance with applicable state or federal regulations;

(8) Any waters or wastes having a pH in excess of 9.5;

(9) Materials which exert or cause:

a. Unusual concentration of inert suspended solids, such as but not limited to fuller's earth, lime slurries and lime residues, or of dissolved solids, such as but not limited to sodium chloride and sodium sulfate;

b. Excessive discoloration, such as but not limited to dye wastes and vegetable tanning solutions;

c. Unusual BOD, chemical oxygen demand or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works; or

d. Unusual volume of flow or concentration of wastes constituting slugs; and

(10) Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed, or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

(b) Notwithstanding anything in this section to the contrary, no person shall discharge or cause to be discharged the following described substances, materials, waters or waste in excess of the specific limitations set forth in this subsection:

Substance	Limitation (mg/l)
Cadmium	0.9
Chromium	0.9
Copper	0.9
Lead	0.09
Nickel	0.9
Zinc	0.07
Arsenic	0.09
Mercury	0.09
Silver	0.23
Cyanide	0.09

(Code 1976, § 5-2008; Ord. of 9-20-93(2), § 3)

Sec. 82-144. - Authority of superintendent in accepting wastes; compliance with federal pretreatment standards.

(a) If any waters or wastes are discharged or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in sections 82-142 and 82-143, and which in the judgment of the superintendent may have a deleterious effect upon the sewerage works, processes, equipment or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the superintendent may:

(1) Reject the wastes;

(2) Require pretreatment to an acceptable condition for discharge to the public sewers;

(3) Require control over the quantities and rates of discharge;

(4) Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges, under the provisions of section 82-149;

(5) Require any sewer user to pay all costs associated with testing of wastewater discharge by that user to the sewer system; and/or

(6) Require sewer system users to sample and report results of tests on wastewater discharge to the sewer system.

If the superintendent permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the superintendent and subject to the requirements of all applicable codes, ordinances and laws.

(b) Any person producing industrial discharges shall comply with the federal pretreatment standards as prescribed by 40 CFR 128.

(Code 1976, § 5-2009; Ord. of 9-20-93(2), § 4)

Sec. 82-145. - Grease, oil and sand interceptors.

Grease, oil and sand interceptors shall be provided when, in the opinion of the superintendent, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts or any flammable wastes, sand or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the superintendent and shall be so located as to be readily and easily accessible for cleaning and inspection.

(Code 1976, § 5-2010)

Sec. 82-146. - Maintenance of pretreatment facilities.

Where preliminary treatment or flow-equalizing facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(Code 1976, § 5-2011)

Sec. 82-147. - Control manhole.

When required by the superintendent, the owner of any property serviced by a building sewer carrying industrial wastes shall install in the building sewer a suitable control manhole together with such meters and other appurtenances necessary to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located and shall be constructed in accordance with plans approved by the superintendent. The manhole shall be installed by the owner, at his expense, and shall be maintained by him so as to be safe and accessible at all times.

(Code 1976, § 5-2012)

Sec. 82-148. - Measurements, tests and analyses.

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in this article shall be determined in accordance with the latest edition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, and shall be determined at the control manhole provided, or upon suitable samples taken at the control manhole. If no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb and property. The particular analyses involved will determine whether a 24-hour composite of all outfalls of a premises is appropriate or whether a grab sample should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24-hour composites of all outfalls, whereas pH's are determined from periodic grab samples.

(Code 1976, § 5-2013)

Sec. 82-149. - Special agreements with industrial users.

No statement contained in this article shall be construed as preventing any special agreement or arrangement between the city and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the city for treatment, subject to payment therefor by the industrial concern.

(Code 1976, § 5-2014)

Secs. 82-150—82-170. - Reserved.